

**Index of Issues:** July, pp. 1-286; August, pp. 287-556; September, pp. 557-814; October, pp. 815-1046; November, pp. 1047-1306; December, pp. 1307-1672.

## SUBJECT INDEX TO VOLUME 89

Entries from JOURNAL departments are identified as follows: Case Reports—(CR); Clinical Investigations—(CI); Correspondence—(CO); Editorial Views—(EV); Educational Material—(EM); Laboratory Investigations—(LI); Laboratory Reports—(LR); Medical Intelligence Article—(MI); Practical Guidelines—(PG); Reports of Scientific Meetings—(SM); Review Article—(RA); Special Article—(SA); Web Site—(WS).

### A

#### Acetaminophen

postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

#### Acetylcholine

cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074

#### Acid-base equilibrium

effects of respiratory alkalosis and acidosis on myocardial blood flow and metabolism in patients with coronary artery disease (CI) [Kazmaier et al.], 831

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CI) [B'chir et al.], 823

postoperative lactic acidosis in patients receiving metformin (CO) [Lustik et al.], 266

specific therapies of biguanide-induced lactic acidosis (CO) [Preiser and Vincent], 267, [Wulf et al.], 267

thiopental alters contraction, intracellular  $Ca^{2+}$ , and  $pH$  in rat ventricular myocytes (LI) [Kanaya et al.], 202

#### Acidosis. See also Lactic acidosis

choice of  $\alpha$ -stat or  $pH$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $pH$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

#### Acute respiratory distress syndrome

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089

phenylephrine and inhaled nitric oxide (CO) [Troncy and Blaise], 538, [Doering et al.], 539

#### Acylase

fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propene (compound A)-derived mercaptopyurates in male Fischer 344 rats (LI) [Uttamsingh et al.], 1174

#### Adenosine

adenosine-induced transient cardiac arrest for placement of endovascular stent-grafts in the thoracic aorta (CO) [Weigand et al.], 1037

in reply [Kahn et al.], 1038

external chest wall stimulation to suppress a permanent transvenous pacemaker in a patient during endovascular stent graft placement (CR) [Moskowitz et al.], 531

intrathecal adenosine administration (CI) [Rane et al.], 1108

#### $\alpha_2$ -Adrenergic agents. See Adrenergic agents and receptors

#### Adrenergic agents and receptors

acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CD) [Booth et al.], 602

beta-blockade in non-cardiac surgical patients (CO) [Leung], 795, [Wallace], 796, [Warltier], 797

bupivacaine 0.01% and/or epinephrine 0.5  $\mu$ g/ml improve epidural fentanyl analgesia after cesarean section (CI) [Cohen et al.], 1354

combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

dexmedetomidine produces similar alterations in the determinants of left ventricular afterload in conscious dogs before and after the development of pacing-induced cardiomyopathy (LI) [Pangel et al.], 741

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089

effect of adding a minidose of clonidine to intrathecal sufentanil for labor analgesia (CI) [Mercier et al.], 594

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

intravenous regional clonidine in the management of sympathetically maintained pain (CR) [Reuben et al.], 527

persistent alterations of the autonomic nervous system after noncardiac surgery (CI) [Amar et al.], 30

propofol-induced increase in vascular capacitance is due to inhibition of sympathetic vasoconstrictive activity (LI) [Hoka et al.], 1495

receptor-specific reversible sedation: beginning of new era of anesthesia? (EV) [Talke], 560

reversal of the sedative and sympatholytic effects of dexmedetomidine with a specific  $\alpha_2$ -adrenoceptor antagonist atipamezole: a pharmacodynamic and kinetic study in healthy volunteers (CI) [Scheinen et al.], 574

role of spinal NO in antiallodynic effect of intrathecal clonidine in neuropathic rats (LI) [Pan et al.], 1518

#### Adult respiratory distress syndrome

additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CI) [Germann et al.], 1401

#### Age factors

sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LI) [Kohane et al.], 1199

#### Aging

sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LI) [Kohane et al.], 1199

#### Air embolism

air embolism during anesthesia for shoulder arthroscopy (CO) [Faure et al.], 805

replacement of air by carbon dioxide (CO) [Rosen], 1036, [O'Brien], 1036

**Airway management. See also Intubation**

airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576  
 complication of Bullard laryngoscope: dislodgement of tip-extender resulting in an upper airway foreign body (CO) [Marshall and James], 1604  
 emergent airway management at a remote hospital location in a patient wearing a halo traction device (CO) [Cohn et al.], 545  
 EXIT procedure facilitates delivery of an infant with a pretracheal teratoma (CR) [Shih et al.], 1573  
 Flexiguide intubation guide to facilitate airway management with WuScope system (CO) [O'Neill et al.], 545  
 foreign body in the trachea originated from the inner wall of the univent tube (CO) [Harioka et al.], 1596  
 post-anesthesia paradoxical vocal cord motion successfully treated with midazolam (CR) [Roberts et al.], 517

**Airway obstruction**

EXIT procedure facilitates delivery of an infant with a pretracheal teratoma (CR) [Shih et al.], 1573  
 post-transplant lymphoproliferative disease may present with severe airway obstruction (CR) [Hammer et al.], 263  
 problem in measuring the area of the pharynx endoscopically (CO) [Nakura et al.], 541, [Isono], 542

**Airway smooth muscle**

halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LI) [Kai et al.], 1543  
 role of intracellular  $\text{Ca}^{2+}$  stores in the inhibitory effect of halothane on airway smooth muscle contraction (LI) [Yamakage et al.], 165

**Alcohol and intoxication**

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509

**Alfentanil**

effects of alfentanil on the ventilatory response to sustained hypoxia (CD) [Cartwright et al.], 612

**Algorithms**

origin of the "algorithm" (CO) [Baraka et al.], 277

**Allergy**

occupational latex allergy: the end of innocence (EV) [Holzman and Katz], 287  
 prevalence of latex allergy among anesthesiologists: identification of sensitized but asymptomatic individuals (CD) [Brown et al.], 292

severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO) [Terazawa et al.], 1296  
 tryptase levels are not increased during vancomycin-induced anaphylactoid reactions (CD) [Renz et al.], 620

**Allodynia**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CD) [Sang et al.], 1060  
 AMPA/kainate receptor antagonists as novel analgesic agents (EV) [Brennan], 1049  
 intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493  
 peripheral morphine administration blocks the development of hyperalgesia and allodynia after bone damage in the rat (LI) [Houghton et al.], 190

role of spinal NO in antiallodynic effect of intrathecal clonidine in neuropathic rats (LI) [Pan et al.], 1518

**Almitrine**

inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxicemic focal lung lesions (CI) [Payen et al.], 1157

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CI) [B'chir et al.], 823

**Alpha-2 adrenergic agents. See Adrenergic agents and receptors****Alveolar macrophages**

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

**Ambulatory care**

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LI) [Ebert et al.], 1524

**Anaphylactic and anaphylactoid reactions**

tryptase levels are not increased during vancomycin-induced anaphylactoid reactions (CI) [Renz et al.], 620

**Anaphylactic shock**

postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

**Anatomy**

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redd], 1262

transmural pressure of epidural veins in the thoracic and lumbar spine of pigs (LI) [Nystrom et al.], 449

**Anesthetic solubility**

partition coefficients of volatile anesthetics in aqueous electrolyte solutions at various temperatures (LR) [Hönemann et al.], 1032

**Aneurysm**

a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CD) [Boylan et al.], 585

severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780

spontaneous recovery after discontinuation of intraoperative cardio-pulmonary resuscitation: case report (CR) [Frölich], 1252

**Angiography**

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Aronson et al.], 1099

**Anticholinergics**

legacy of Atropos, the Fate who cut the thread of life (SA) [Holzman], 241

**Anticholinesterases**

cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CD) [Shafer et al.], 1074

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LI) [Beaufort et al.], 707

intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493

## SUBJECT INDEX TO VOLUME 89

## Anticholinesterases—Barbiturates

multi-center study of intrathecal neostigmine for analgesia following vaginal hysterectomy (CI) [Lauretti et al.], 913

**Antiemetics. See Nausea, vomiting, and antiemetics**

**Antinociception**

- epigastric antinociception by cervical dorsal column lesions in rats (LI) [Feng et al.], 411
- interaction of intrathecally infused morphine and lidocaine in rats (part I: synergistic antinociceptive effects (LI) [Saito et al.], 1455
- interaction of intrathecally infused morphine and lidocaine in rats (part II: effects on the development of tolerance to morphine (LI) [Saito et al.], 1464
- intrathecal adenosine administration (CI) [Rane et al.], 1108
- spinal nitric oxide mediates antinociception from intravenous morphine (LI) [Song et al.], 215

**Anxiety**

- parental presence during induction of anesthesia *versus* sedative premedication: which intervention is more effective? (CI) [Kain et al.], 1147

**Anxiolytics**

- population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430
- population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

**Aortic aneurysm**

- epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585
- severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780

**Aortic compliance**

- cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hettick et al.], 1166

**Aortic crossclamping**

- adenosine-induced transient cardiac arrest for placement of endovascular stent-grafts in the thoracic aorta (CO) [Weigand et al.], 1037, [Kahn et al.], 1038

**Apnea testing**

- tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250

**Aprotinin**

- the blood sparing effect of aprotinin should be revisited (CO) [Lentschener and Benhamou], 1598
- emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777

**Arachidonic acid metabolism**

- aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LI) [Gomez de Segura et al.], 1489

**Arrhythmias**

- $\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CI) [Balser et al.], 1052
- effects of sevoflurane on QT interval in a patient with congenital long QT syndrome (CR) [Gallagher et al.], 1569
- heart rate variability during chemical thoracic sympathectomy (CI) [Hirose et al.], 666

magnesium and cardiovascular disease (MI) [Gomez], 222

**Arterial oxygenation**

- improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586
- inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157

**Arteriovenous shunt**

- upper extremity veno-arterial shunting during pediatric orthotopic liver transplantation (CR) [Henderson et al.], 1247

**Arthroscopic surgery**

- air embolism during anesthesia for shoulder arthroscopy (CO) [Faure et al.], 805

**Artifacts**

- evoked potential monitoring and EKG: a case of a serious "cardiac arrhythmia" (CR) [Diachun et al.], 1270

**Aspirin**

- postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

**Asthma**

- acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290
- bronchospasm and "reflex right upper lobe atelectasis" (CO) [Sprung et al.], 803
- combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

**Atelectasis**

- atelectasis and gas exchange after cardiac surgery (CI) [Tenner et al.], 371
- bronchospasm and "reflex right upper lobe atelectasis" (CO) [Sprung et al.], 803

**Atenolol**

- effects of atenolol on postoperative myocardial ischemia (CO) [Lustik et al.], 794

**Atipamezole**

- reversal of the sedative and sympatholytic effects of dexmedetomidine with a specific  $\alpha_2$ -adrenoceptor antagonist atipamezole: a pharmacodynamic and kinetic study in healthy volunteers (CI) [Scheinen et al.], 574

**Atrial fibrillation**

- $\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CI) [Balser et al.], 1052

**Awareness. See Psychology, memory, and awareness**

## B

## Back pain

- local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CI) [Wang et al.], 1414

## Bacteriology

- source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254

## Barbiturates

- effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

is lack of statistical power always evidence of lack of effect? (CO) [Tommasino], 798, [Warner and Dexter], 799

thiopental inhibits increases in  $[Ca^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

**Beecher, Henry K.**  
Henry K. Beecher, M.D.: an historical perspective? (CO) [Bacon], 792, [Gravenstein], 794

**Behavioral testing**  
repetitive post-training exposure to enflurane modifies spatial memory in mice (LI) [Komatsu et al.], 1184

**Belladonna**  
legacy of Atropos, the Fate who cut the thread of life (SA) [Holzman], 241

**Benzodiazepines and antagonists**  
effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

isobolographic analysis of the interactions between midazolam and propofol at  $GABA_A$  receptors in embryonic mouse neurons (LI) [McAdam et al.], 1444

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

post-anesthesia paradoxical vocal cord motion successfully treated with midazolam (CR) [Roberts et al.], 517

**Beta blockade**  
 $\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CI) [Balser et al.], 1052

**Bier block**  
the centennial of spinal anesthesia (SA) [Wulf], 500

low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345

**Biguanide**  
specific therapies of biguanide-induced lactic acidosis (CO) [Preiser and Vincent], 267

**Bispectral index**  
bispectral EEG index during nitric oxide administration (CI) [Rampil et al.], 671

EEGs, EEG processing, and the bispectral index (EV) [Todd], 815

primer for EEG signal processing in anesthesia (RA) [Rampil], 980

quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

unreasonable low BIS values in a volunteer with genetically determined low voltage EEG (CO) [Schnider et al.], 1607

**Bleeding**  
intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567

**Blood-brain barrier**  
barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

**Blood coagulation**  
differential effect of halothane and forskolin on platelet cytosolic  $Ca^{2+}$  mobilization and aggregation (LI) [Corbin et al.], 401

emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777

intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567

postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

treatment of pulmonary embolism during cesarean section with recombinant tissue plasminogen activator (CR) [Nishimura et al.], 1027

**Blood conservation**  
the blood sparing effect of aprotinin should be revisited (CO) [Lentschener and Benhamou], 1598

**Blood loss**  
blood loss from a defective needleless arterial sampling port (CO) [Michelsen and Zaffer], 275

the blood sparing effect of aprotinin should be revisited (CO) [Lentschener and Benhamou], 1598

**Blood pressure**  
assessing fluid responsiveness by the systolic pressure variation in mechanically ventilated patients (EV) [Perel], 1309

effect of various lithotomy positions on lower-extremity blood pressure (CI) [Halliwill et al.], 1373

intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CI) [Riley et al.], 73

systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CI) [Tavernier et al.], 1313

**Blood transfusions**  
the blood sparing effect of aprotinin should be revisited (CO) [Lentschener and Benhamou], 1598

Reid and Nance (eds.), *Red Cell Transfusion: A Practical Guide* (EM) [Gregoretti], 1301

transfusion-related acute lung injury (TRALI) complicating colectomy for ulcerative colitis (CR) [Keifer et al.], 1020

upper extremity veno-arterial shunting during pediatric orthotopic liver transplantation (CR) [Henderson et al.], 1247

**Blood volume measurement**  
blood volume measurement: the next intraoperative monitor? (EV) [Barker], 1310

blood volume measurement at the bedside using ICG pulse spectro-photometry (CI) [Haruna et al.], 1322

circulating blood volume measured by pulse dye-densitometry: comparison with 131I-HSA analysis (CI) [Iijima et al.], 1329

**Body piercing**  
tongue rings: just say no (CO) [Rosenberg et al.], 1279, [Mandabach et al.], 1279

**Bone injury**  
peripheral morphine administration blocks the development of hyperalgesia and allodynia after bone damage in the rat (LI) [Houghton et al.], 190

**Brain and brain function**  
impact of systemic vasoconstrictors on the cerebral circulation of anesthetized patients (CI) [Strebel et al.], 67

**Brain death**  
tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250

**Brain function and disease**  
acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CI) [Booth et al.], 602

## SUBJECT INDEX TO VOLUME 89

## Brain function and disease—Carbon dioxide

anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289

cerebral blood flow and  $\text{CO}_2$  reactivity is similar during remifentanil/ $\text{N}_2\text{O}$  and fentanyl/ $\text{N}_2\text{O}$  anesthesia (CI) [Ostapkovich et al.], 358

cerebrovascular  $\text{CO}_2$  reactivity during anesthesia in patients with diabetes mellitus and peripheral vascular disease (CI) [Kawata et al.], 887

comparison of *pH*-stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391

differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961

is lack of statistical power always evidence of lack of effect? (CO) [Tomasino], 798, [Warner and Dexter], 799

isoflurane and sevoflurane induce vasodilation of cerebral vessels *via* ATP-sensitive  $\text{K}^+$  channel activation (LI) [Iida et al.], 954

local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane *versus* isoflurane anesthesia in rats (LI) [Lenz et al.], 1480

repetitive post-training exposure to enflurane modifies spatial memory in mice (LI) [Komatsu et al.], 1184

thiopental inhibits increases in  $[\text{Ca}^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

**Brain stem**

total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

**Breast milk and lactation**

secretion of dantrolene into breast milk after acute therapy of a suspected malignant hyperthermia crisis during cesarean section (CR) [Fricker et al.], 1023

**Bronchoalveolar lavage**

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

**Bronchospasm**

acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290

bronchospasm and "reflex right upper lobe atelectasis" (CO) [Sprung et al.], 803

combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

**Buccal absorption**

oral etomidate (CO) [Lauretti], 1280, [Streisand], 1281

**Bupivacaine**

bupivacaine 0.01% and/or epinephrine 0.5  $\mu\text{g}/\text{ml}$  improve epidural fentanyl analgesia after cesarean section (CI) [Cohen et al.], 1354

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

prolonged intercostal nerve blockade in sheep using controlled-release of bupivacaine and dexamethasone from polymer microspheres (LI) [Dräger et al.], 969

re-examination of tetrodotoxin for prolonged duration local anesthesia (LI) [Kohane et al.], 119

sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LI) [Kohane et al.], 1199

**Burn injury**

airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576

anesthesia for major thermal injury (RA) [MacLennan et al.], 749

peripheral analgesic effects of ketamine in acute inflammatory pain (CI) [Pedersen et al.], 58

**Butorphanol**

transnasal butorphanol is effective for postoperative pain relief in children undergoing myringotomy (CI) [Bennie et al.], 385

## C

**Calcium and calcium channels.** *See also Ions and ion channels*

anesthetic-induced alteration of  $\text{Ca}^{2+}$  homeostasis in neural cells: a temperature-sensitive process that is enhanced by blockade of plasma membrane  $\text{Ca}^{2+}$ -ATPase isoforms (LI) [Franks et al.], 149

differential effect of halothane and forskolin on platelet cytosolic  $\text{Ca}^{2+}$  mobilization and aggregation (LI) [Corbin et al.], 401

differential effects of fentanyl and morphine on intracellular  $\text{Ca}^{2+}$  transients and contraction in rat ventricular myocytes (LI) [Kanay et al.], 1532

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LI) [Kai et al.], 1543

mechanisms of isoflurane-increased submaximum  $\text{Ca}^{2+}$ -activated force in rabbit skinned femoral arterial strips (LI) [Toda and Sul], 731

role of intracellular  $\text{Ca}^{2+}$  stores in the inhibitory effect of halothane on airway smooth muscle contraction (LI) [Yamakage et al.], 165

thiopental alters contraction, intracellular  $\text{Ca}^{2+}$ , and *pH* in rat ventricular myocytes (LI) [Kanaya et al.], 202

thiopental inhibits increases in  $[\text{Ca}^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

**Calcium channel blockade**

$\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CI) [Balser et al.], 1052

**Capnography**

another cause of a prolonged downstroke in the capnograph (CO) [Ti and Dhara], 801

**Capsaicin**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

**Carbon dioxide**

cerebral blood flow and  $\text{CO}_2$  reactivity is similar during remifentanil/

## SUBJECT INDEX TO VOLUME 89

## Carbon dioxide—Cardiopulmonary resuscitation

$\text{N}_2\text{O}$  and fentanyl/ $\text{N}_2\text{O}$  anesthesia (CD) [Ostapkovich et al.], 358

cerebrovascular  $\text{CO}_2$  reactivity during anesthesia in patients with diabetes mellitus and peripheral vascular disease (CD) [Kawata et al.], 887

choice of  $\alpha$ -stat or  $p\text{H}$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $p\text{H}$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

effects of hyperventilation and hypocapnic/normocapnic hypoxemia on renal function and lithium clearance in humans (CI) [Olsen et al.], 1389

effects of intraabdominally insufflated carbon dioxide and elevated intraabdominal pressure on splanchnic circulation: an experimental study in pigs (LI) [Blobner et al.], 475

effects of respiratory alkalosis and acidosis on myocardial blood flow and metabolism in patients with coronary artery disease (CI) [Kazmaier et al.], 831

hypercapnia prevents jugular bulb desaturation during rewarming from hypothermic cardiopulmonary bypass (CI) [Hänel et al.], 19

method for measuring carbon dioxide at the tracheal stoma (CO) [Williams et al.], 799

replacement of air by carbon dioxide (CO) [Rosen], 1036, [O'Brien], 1036

severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780

**Carbon monoxide**

mechanistic aspects of carbon monoxide formation from volatile anesthetics (LI) [Baxter et al.], 929

**Cardiac arrhythmias. See Arrhythmias**

**Cardiac output**

continuous cardiac output catheters: delay in *in vitro* response time after controlled flow changes (LR) [Aranda et al.], 1592

intraoperative determination of cardiac output using multiplane transesophageal echocardiography: a comparison to thermodilution (CI) [Perrino et al.], 350

**Cardiac surgery. See also Cardiovascular anesthesia**

atelectasis and gas exchange after cardiac surgery (CI) [Tenling et al.], 371

choice of  $\alpha$ -stat or  $p\text{H}$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $p\text{H}$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

DiNardo (ed.), *Anesthesia for Cardiac Surgery, 2nd edition* (EM) [Nielsen], 1302

hyperprolactinemia in patients with noninfectious SIRS and pulmonary dysfunction associated with cardiopulmonary bypass (CD) [Hensel et al.], 93

intraoperative awareness in fast-track cardiac anesthesia (CI) [Dowd et al.], 1068

perforation of the right ventricle with a coronary sinus catheter during preparation for minimally invasive cardiac surgery (CR) [Abramson et al.], 519

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

replacement of air by carbon dioxide (CO) [O'Brien], 1036, [Rosen], 1036

**Cardiomyocytes**

differential effects of fentanyl and morphine on intracellular  $\text{Ca}^{2+}$  transients and contraction in rat ventricular myocytes (LI) [Kanay et al.], 1532

thiopental alters contraction, intracellular  $\text{Ca}^{2+}$ , and  $p\text{H}$  in rat ventricular myocytes (LI) [Kanaya et al.], 202

**Cardiomyopathy**

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hettick et al.], 1166

dexmedetomidine produces similar alterations in the determinants of left ventricular afterload in conscious dogs before and after the development of pacing-induced cardiomyopathy (LI) [Pagan et al.], 741

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191

**Cardioplegia**

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Arnon et al.], 1099

**Cardioprotection**

magnesium and cardiovascular disease (MI) [Gomez], 222

**Cardiopulmonary bypass**

acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CI) [Booth et al.], 602

choice of  $\alpha$ -stat or  $p\text{H}$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $p\text{H}$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961

emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777

hypercapnia prevents jugular bulb desaturation during rewarming from hypothermic cardiopulmonary bypass (CI) [Hänel et al.], 19

hyperprolactinemia in patients with noninfectious SIRS and pulmonary dysfunction associated with cardiopulmonary bypass (CI) [Hensel et al.], 93

jugular venous hemoglobin desaturation during rewarming on cardiopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

nitric oxide inhibits neutrophil adhesion during experimental extra-corporeal circulation (LI) [Chello et al.], 443

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

**Cardiopulmonary resuscitation**

cardiac massage: a method rescued from oblivion (SA) [Juvin and J-M Desmonts], 771

spontaneous recovery after discontinuation of intraoperative cardiopulmonary resuscitation: case report (CR) [Fröhlich], 1252

## SUBJECT INDEX TO VOLUME 89

## Cardiovascular anesthesia—Central venous catheter/catheterization

**Cardiovascular anesthesia. See also Cardiac surgery**

acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CD) [Booth et al.], 602

adenosine-induced transient cardiac arrest for placement of endovascular stent-grafts in the thoracic aorta (CO) [Kahn et al.], 1038, [Weigand et al.], 1037

anesthesia safety, outcomes, and prospective study design (CO) [Price and Carpenter], 790, [Auroy et al.], 791

atelectasis and gas exchange after cardiac surgery (CD) [Tenling et al.], 371

combined use of transesophageal echocardiography and basket catheter can prevent tumor embolism in a patient with renal cell carcinoma (CR) [Tanaka et al.], 1015

comparison of left ventricular performance indices measured by transesophageal echocardiography with automated border detection (CD) [Declerk et al.], 341

concentration-response relationships for fentanyl and sufentanil in patients undergoing coronary artery bypass grafting (CD) [Thomson et al.], 852

early hemodynamic changes following emergency mitral valve replacement for traumatic mitral insufficiency following balloon mitral valvotomy: report of six cases (CR) [Tempe et al.], 1583

emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CD) [Boylan et al.], 585

external chest wall stimulation to suppress a permanent transvenous pacemaker in a patient during endovascular stent graft placement (CR) [Moskowitz et al.], 531

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CD) [Aronson et al.], 1099

intraoperative awareness in fast-track cardiac anesthesia (CD) [Dowd et al.], 1068

intraoperative determination of cardiac output using multiplane transesophageal echocardiography: a comparison to thermodilution (CD) [Perrino et al.], 350

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

no evidence of ischemic preconditioning during coronary revascularization (CO) [Lennon], 1601

perforation of the right ventricle with a coronary sinus catheter during preparation for minimally invasive cardiac surgery (CR) [Abramson et al.], 519

perfuse or precondition? (CO) [Borges and Coulson], 1600

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CD) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CD) [Zomorodi et al.], 1418

severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780

spontaneous recovery after discontinuation of intraoperative cardiopulmonary resuscitation: case report (CR) [Frölich], 1252

**Cardiovascular function and disease. See also Heart function and disease**

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hettick et al.], 1166

jugular venous hemoglobin desaturation during rewarming on cardiopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3

magnesium and cardiovascular disease (MI) [Gomez], 222

predicting long-term postoperative cardiovascular outcomes (CO) [Litwack and DeGruttola], 1286, [Badner and Gelb], 1287, [Mangano], 1288

**Cardiovascular pharmacology**

adenosine-induced transient cardiac arrest for placement of endovascular stent-grafts in the thoracic aorta (CO) [Weigand et al.], 1037, [Kahn et al.], 1038

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CD) [Papazian et al.], 1089

external chest wall stimulation to suppress a permanent transvenous pacemaker in a patient during endovascular stent graft placement (CR) [Moskowitz et al.], 531

**Carotid artery puncture**

a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273

**Carotid endarterectomy**

prospective, randomized comparison of deep or superficial cervical plexus block for carotid endarterectomy surgery (CD) [Stoneham et al.], 907

**Catecholamines**

$\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CD) [Balsler et al.], 1052

dobutamine antagonizes epinephrine's biochemical and cardiotonic effects: results of an *in vitro* model using human lymphocytes and a clinical study in patients recovering from cardiac surgery (CD) [Prielipp et al.], 49

isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CD) [Segawa et al.], 1407

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191

persistent alterations of the autonomic nervous system after noncardiac surgery (CD) [Amar et al.], 30

**Catheterization, central venous. See Central venous catheter/catheterization**

**Catheterization, epidural. See Epidural anesthesia and analgesia**

**Catheterization, pulmonary artery. See Pulmonary artery catheter/catheterization**

**CD-ROM**

Tamburini (ed.), *Quality of Life Assessment in Medicine. A CD-ROM for Windows, Issue 2* (EM) [Raja and Haythornthwaite], 1043

Wall and Melzack (eds.), *Textbook of Pain on CD-ROM* (EM) [Schell], 552

**Central venous catheter/catheterization**

complex regional pain syndrome type II as a complication of subclavian catheter insertion (CO) [Burton et al.], 804

a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273

perforation of the right ventricle with a coronary sinus catheter during preparation for minimally invasive cardiac surgery (CR) [Abramson et al.], 519

severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO) [Terazawa et al.], 1296

**Centroneuraxial blockade**  
local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CI) [Wang et al.], 1414

**Cerebral aneurysm**  
a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273

**Cerebral blood flow**  
cerebral blood flow and  $\text{CO}_2$  reactivity is similar during remifentanil/ $\text{N}_2\text{O}$  and fentanyl/ $\text{N}_2\text{O}$  anesthesia (CI) [Ostapkovich et al.], 358

cerebrovascular  $\text{CO}_2$  reactivity during anesthesia in patients with diabetes mellitus and peripheral vascular disease (CI) [Kawata et al.], 887

choice of  $\alpha$ -stat or  $p\text{H}$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $p\text{H}$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

hypercapnia prevents jugular bulb desaturation during rewarming from hypothermic cardiopulmonary bypass (CI) [Hänel et al.], 19

impact of systemic vasoconstrictors on the cerebral circulation of anesthetized patients (CI) [Strebel et al.], 67

isoflurane and sevoflurane induce vasodilation of cerebral vessels *via* ATP-sensitive  $\text{K}^+$  channel activation (LI) [Iida et al.], 954

local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane *versus* isoflurane anesthesia in rats (LI) [Lenz et al.], 1480

**Cerebral ischemia/anoxia**  
anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirschl], 289

choice of  $\alpha$ -stat or  $p\text{H}$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $p\text{H}$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391

thiopental inhibits increases in  $[\text{Ca}^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

**Cerebral metabolism**  
local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane *versus* isoflurane anesthesia in rats (LI) [Lenz et al.], 1480

quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

**Cerebrospinal fluid**  
cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074

lumbosacral cerebrospinal fluid volume is the primary determinant of sensory block extent and duration during spinal anesthesia (CI) [Carpenter et al.], 24

**Cervical plexus blocks**  
prospective, randomized comparison of deep or superficial cervical plexus block for carotid endarterectomy surgery (CI) [Stoneham et al.], 907

**Cervical spine movement**  
emergent airway management at a remote hospital location in a patient wearing a halo traction device (CO) [Cohn et al.], 545

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

**Cesarean delivery. See also Obstetric anesthesia**  
anesthesia for cesarean section in a pituitary dwarf (CR) [Ratner and Hamilton], 253

bupivacaine 0.01% and/or epinephrine 0.5  $\mu\text{g}/\text{ml}$  improve epidural fentanyl analgesia after cesarean section (CI) [Cohen et al.], 1354

effect of propofol on isolated human pregnant uterine muscle (CI) [Shih et al.], 105

EXIT procedure facilitates delivery of an infant with a pretracheal teratoma (CR) [Shih et al.], 1573

obstetric anesthesia 1988–1996 in Northrhine/Germany: results of the perinatal survey at the chambers of physicians (CO) [Josten et al.], 1288

randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CI) [Gambling et al.], 1336

secretion of dantrolene into breast milk after acute therapy of a suspected malignant hyperthermia crisis during cesarean section (CR) [Fricker et al.], 1023

treatment of pulmonary embolism during cesarean section with recombinant tissue plasminogen activator (CR) [Nishimura et al.], 1027

**c-fos**  
differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961

**Chemistry**  
fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propane (compound A)-derived mercaptourates in male Fischer 344 rats (LI) [Uttamsingh et al.], 1174

mechanistic aspects of carbon monoxide formation from volatile anesthetics (LI) [Baxter et al.], 929

**Chemoreceptors**  
carotid body chemoreceptor function is impaired by vecuronium during hypoxia (LI) [Wyon et al.], 1471

**Cholinesterase**  
cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LI) [Beaufort et al.], 707

intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493

## SUBJECT INDEX TO VOLUME 89

## Cholinesterase—Complications

multi-center study of intrathecal neostigmine for analgesia following vaginal hysterectomy (CI) [Lauretti et al.], 913

**Circulatory arrest**  
adenosine-induced transient cardiac arrest for placement of endovascular stent-grafts in the thoracic aorta (CO) [Weigand et al.], 1037, [Kahn et al.], 1038

comparison of pH-stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961

**Circulatory physiology and hemodynamics**  
acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CI) [Booth et al.], 602

blood volume measurement: the next intraoperative monitor? (EV) [Barker], 1310

blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hetrick et al.], 1166

comparison of left ventricular performance indices measured by transesophageal echocardiography with automated border detection (CI) [Declercq et al.], 341

dexmedetomidine produces similar alterations in the determinants of left ventricular afterload in conscious dogs before and after the development of pacing-induced cardiomyopathy (LI) [Pagan et al.], 741

early hemodynamic changes following emergency mitral valve replacement for traumatic mitral insufficiency following balloon mitral valvotomy: report of six cases (CR) [Tempe et al.], 1583

effect of various lithotomy positions on lower-extremity blood pressure (CI) [Halliwill et al.], 1373

effects of intraabdominally insufflated carbon dioxide and elevated intraabdominal pressure on splanchnic circulation: an experimental study in pigs (LI) [Blobner et al.], 475

effects of respiratory alkalosis and acidosis on myocardial blood flow and metabolism in patients with coronary artery disease (CI) [Kazmaier et al.], 831

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CI) [Segawa et al.], 1407

preservation of hypoxic pulmonary vasoconstriction during sevoflurane and desflurane anesthesia compared to the conscious state in chronically instrumented dogs (LI) [Lesitsky et al.], 1501

propofol-induced increase in vascular capacitance is due to inhibition of sympathetic vasoconstrictive activity (LI) [Hoka et al.], 1495

systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CI) [Tavernier et al.], 1313

transmural pressure of epidural veins in the thoracic and lumbar spine of pigs (LI) [Nystrom et al.], 449

treatment of pulmonary hypertension and hypoxia due to oleic acid

induced lung injury with intrathecal prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Cisatracurium**  
comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CI) [Naguib et al.], 1116

high concentration cisatracurium ICU solution (CO) [Nishio et al.], 1605

**Clinical trials**  
efficacy and costs of patient-controlled analgesia *versus* regularly administered intramuscular opioid therapy (CI) [Choinière et al.], 1377

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

**Clonidine**  
effect of adding a minidose of clonidine to intrathecal sufentanil for labor analgesia (CI) [Mercier et al.], 594

intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493

intravenous regional clonidine in the management of sympathetically maintained pain (CR) [Reuben et al.], 527

role of spinal NO in antiallodynic effect of intrathecal clonidine in neuropathic rats (LI) [Pan et al.], 1518

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

**Coagulation. See Blood coagulation**

**Compartment syndrome**  
effect of various lithotomy positions on lower-extremity blood pressure (CI) [Halliwill et al.], 1373

**Complications. See also Postoperative complications; Postoperative pain**  
accidental intravascular placement of a feeding tube (CR) [Düthorn et al.], 251

acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290

air embolism during anesthesia for shoulder arthroscopy (CO) [Faure et al.], 805

airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576

anesthesia safety, outcomes, and prospective study design (CO) [Price and Carpenter], 790, [Auroy et al.], 791

bronchospasm and "reflex right upper lobe atelectasis" (CO) [Sprung et al.], 803

complex regional pain syndrome type II as a complication of subclavian catheter insertion (CO) [Burton et al.], 804

complication of Bullard laryngoscope: dislodgement of tip-extender resulting in an upper airway foreign body (CO) [Marshall and James], 1604

a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273

does anesthesiology, like history, repeat itself? (CO) [Eisenach and D'Angelo], 542, [Joos and Van Steenberge], 542

early fat embolism after liposuction (CO) [Fourme et al.], 782

effect of various lithotomy positions on lower-extremity blood pressure (CI) [Halliwill et al.], 1373

effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133

electrical fires in Hewlett-Packard monitors due to saline contamination (CR) [Reynolds et al.], 521

fatal pulmonary fat embolism in early postoperative period (CR) [Heine et al.], 1589

foreign body in the trachea originated from the inner wall of the univent tube (CO) [Harioka et al.], 1596

general anesthesia for a patient with centronuclear (myotubular) myopathy (CR) [Gottschalk et al.], 1018

heart rate variability during chemical thoracic sympathectomy (CI) [Hirose et al.], 666

incompatibility of propofol emulsion with anesthetic drugs (CO) [Lamontagne et al.], 1609

is your pulmonary artery catheter shedding? (CO) [Olhoeft], 544, [Moore], 544, [Erb and Ramsay], 543

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CD) [Wang et al.], 1414

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

metallic mercury leak from the esophageal bougy and postoperative chest pain (CO) [Taylor and Kamaya], 548

multicenter study of contaminated percutaneous injuries in anesthesia personnel (CD) [Greene et al.], 1362

neurologic symptom associated with a repeated injection after failed spinal anesthesia (CO) [Hirabayashi et al.], 1294

oral ketamine for the management of combative autistic adult (CO) [Bachenberg], 549

perforation of the right ventricle with a coronary sinus catheter during preparation for minimally invasive cardiac surgery (CR) [Abramson et al.], 519

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

pneumothorax during endoscopic extraperitoneal herniorrhaphy (CO) [Toyoshima et al.], 1040

postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

postoperative lactic acidosis in patients receiving metformin (CO) [Lustik et al.], 266

potential cause for medication administration error (CO) [Donahue and Needelman], 800

predicting malignant hyperthermia susceptibility (CO) [Allen], 797, [Fierobe], 798

prevalence of latex allergy among anesthesiologists: identification of sensitized but asymptomatic individuals (CI) [Brown et al.], 292

prolonged loss of consciousness and elevated porphyrins following propofol administrations (CR) [Asirvatham et al.], 1029

proposal for new temperature monitoring and thermal management guidelines (CO) [Sessler], 1298

prospective, randomized comparison of deep or superficial cervical plexus block for carotid endarterectomy surgery (CI) [Stoneham et al.], 907

pulse oximetry probe adhesive disks: a potential for infant aspiration (CO) [Reddy and Cook-Sather], 1603

severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO) [Terazawa et al.], 1296

small doses of sufentanil will produce violent coughing in young children (CO) [Yemen], 271, [Bennett et al.], 272

source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254

specific therapies of biguanide-induced lactic acidosis (CO) [Preiser and Vincent], 267, [Wulf et al.], 267, [Wulf et al.], 267

spontaneous recovery after discontinuation of intraoperative cardio-pulmonary resuscitation: case report (CR) [Frölich], 1252

*Streptococcus salivarius* meningitis after spinal anesthesia (CR) [Laurila et al.], 1579

tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250

third degree heart block and asystole associated with spinal anesthesia (CR) [Jordi et al.], 257

total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

transfusion-related acute lung injury (TRALI) complicating colectomy for ulcerative colitis (CR) [Keifer et al.], 1020

transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CI) [Freedman et al.], 633

transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Lambert], 274, [Sakura and Drasner], 274, [Rowlingson], 275

unusual cause of intravenous catheter obstruction (CO) [Stone and Leon], 276

use of a guide wire to facilitate tracheal intubation with the Bullard laryngoscope (CO) [Ringwalt], 805

**Compound A**

effects of sevoflurane and isoflurane on renal function and on possible markers of nephrotoxicity (CI) [Higuchi et al.], 307

fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propane (compound A)-derived mercaptoururates in male Fischer 344 rats (LI) [Uttamsingh et al.], 1174

**Computed tomography (CT)**

atelectasis and gas exchange after cardiac surgery (CI) [Tenling et al.], 371

**Computers**

medical information on the Internet (SA) [Rampil], 1233

**Congenital heart disease**

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

**Continuous infusion**

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

**Contrast echocardiography**

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Aronson et al.], 1099

**Cooperative management**

combined use of transesophageal echocardiography and basket catheter can prevent tumor embolism in a patient with renal cell carcinoma (CR) [Tanaka et al.], 1015

## SUBJECT INDEX TO VOLUME 89

## Coronary artery bypass grafting—Depth of anesthesia

**Coronary artery bypass grafting**

concentration-response relationships for fentanyl and sufentanil in patients undergoing coronary artery bypass grafting (CI) [Thomson et al.], 852

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Aronson et al.], 1099

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

**Coronary artery disease**

effects of respiratory alkalosis and acidosis on myocardial blood flow and metabolism in patients with coronary artery disease (CI) [Kazmaier et al.], 831

**Coronary circulation**

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Aronson et al.], 1099

isoflurane-induced dilation of porcine coronary arterioles is mediated by ATP-sensitive potassium channels (LI) [Zhou et al.], 182

volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

**Crisis management**

assessment of clinical performance during simulated crises using both technical and behavioral ratings (CI) [Gaba et al.], 8

**Critical care**

Abrams and Grande (eds.), *Trauma Anesthesia and Critical Care of Neurological Injury* (EM) [Pittet], 1301

additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CI) [Germano et al.], 1401

$\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CI) [Balser et al.], 1052

blood volume measurement: the next intraoperative monitor? (EV) [Barker], 1310

blood volume measurement at the bedside using ICG pulse spectrophotometry (CD) [Haruna et al.], 1322

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089

high concentration cisatracurium ICU solution (CO) [Nishio et al.], 1605

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CI) [B'chir et al.], 823

ITACCS (International Trauma Anesthesia and Critical Care Society) (WS) [McCunn], 554

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

renal nerves are not involved in sodium and water retention during mechanical ventilation in awake dogs (LI) [Boemke et al.], 942

Sasada and Smith, *Drugs in Anesthesia and Intensive Care, Second Edition* [Mark], 279

Unknown, *Cardiopulmonary Critical Care, 3rd Edition* (EM) [MacGregor], 1610

**Cryoablation**

cryoanalgesia: a novel treatment for hip adductor spasticity and obturator neuralgia (CR) [Kim and Ferrante], 534

**Cyclic AMP and GMP**

acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CI) [Booth et al.], 602

differential effect of halothane and forskolin on platelet cytosolic  $Ca^{2+}$  mobilization and aggregation (LI) [Corbin et al.], 401

dobutamine antagonizes epinephrine's biochemical and cardiotoxic effects: results of an *in vitro* model using human lymphocytes and a clinical study in patients recovering from cardiac surgery (CI) [Prielipp et al.], 49

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

lack of correlation between the reduction of sevoflurane MAC and the cerebellar cyclic GMP concentrations in mice treated with 7-nitroindazole (LI) [Ichinose et al.], 143

**Cyclooxygenase**

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LI) [Gomez de Segura et al.], 1489

**Cytokines**

effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133

**D****Dantrolene**

secretion of dantrolene into breast milk after acute therapy of a suspected malignant hyperthermia crisis during cesarean section (CR) [Fricker et al.], 1023

**ddN mice**

repetitive post-training exposure to enflurane modifies spatial memory in mice (LI) [Komatsu et al.], 1184

**Depth of anesthesia**

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LI) [Gomez de Segura et al.], 1489

bispectral EEG index during nitric oxide administration (CD) [Rampil et al.], 671

effect of isoflurane on the auditory steady-state response and on consciousness in human volunteers (CD) [Plourde et al.], 844

skin vasomotor reflex as a measure of depth of anesthesia (CO) [Ezri et al.], 1281, [Shimoda], 1282

**Desflurane**

antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CD) [Song et al.], 838

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LD) [Vivien et al.], 1191

non-thermoregulatory shivering in patients recovering from isoflurane or desflurane anesthesia (CD) [Horn et al.], 878

**Dexmedetomidine**

dexmedetomidine produces similar alterations in the determinants of left ventricular afterload in conscious dogs before and after the development of pacing-induced cardiomyopathy (LD) [Pagedal et al.], 741

receptor-specific reversible sedation: beginning of new era of anesthesia? (EV) [Talke], 560

reversal of the sedative and sympatholytic effects of dexmedetomidine with a specific  $\alpha_2$ -adrenoceptor antagonist atipamezole: a pharmacodynamic and kinetic study in healthy volunteers (CD) [Scheinen et al.], 574

**Diabetes mellitus**

cerebrovascular  $\text{CO}_2$  reactivity during anesthesia in patients with diabetes mellitus and peripheral vascular disease (CD) [Kawata et al.], 887

**Difficult airway**

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

**Diphenhydramine**

diphenhydramine increases ventilatory drive during alfentanil infusion (CD) [Babenco et al.], 642

**Disinfection**

source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254

**Dobutamine**

dobutamine antagonizes epinephrine's biochemical and cardiotonic effects: results of an *in vitro* model using human lymphocytes and a clinical study in patients recovering from cardiac surgery (CD) [Prielipp et al.], 49

**Dose response**

comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CD) [Naguib et al.], 1116

high concentration cisatracurium ICU solution (CO) [Nishio et al.], 1605

**Double-lumen tubes**

displacement of double-lumen tubes after patient positioning (CO) [Cheng et al.], 1282, [Klein and Karzai], 1283

**Drug addiction and withdrawal**

illicit substance abuse *via* an implanted intrathecal pump (CR) [Burton et al.], 1264

**Drug delivery**

prolonged intercostal nerve blockade in sheep using controlled-release of bupivacaine and dexamethasone from polymer microspheres (LD) [Dräger et al.], 969

**Drug interactions**

comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CD) [Naguib et al.], 1116

formulation-dependent brain and lung distribution kinetics of propofol in rats (LD) [Dutta and Ebding], 678

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LD) [Saito et al.], 1455

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LD) [Saito et al.], 1464

isobolgraphic analysis of the interactions between midazolam and propofol at  $\text{GABA}_A$  receptors in embryonic mouse neurons (LD) [McAdam et al.], 1444

Mueller and Lundberg, *Manual of Drug Interactions for Anesthesia* (EM) [Sarathy and Cullen], 810

pharmacodynamic interaction between propofol and fentanyl with respect to the suppression of somatic or hemodynamic responses to skin incision, peritoneum incision, and abdominal wall retraction (CD) [Kazama et al.], 894

**Drug metabolism**

rate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propene (compound A)-derived mercaptopurates in male Fischer 344 rats (LD) [Uttamsingh et al.], 1174

**Drug toxicity**

assessment of teratogenic effects of lidocaine in rat embryos (LD) [Fujinaga], 1553

effects of sevoflurane and isoflurane on renal function and on possible markers of nephrotoxicity (CD) [Higuchi et al.], 307

rate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propene (compound A)-derived mercaptopurates in male Fischer 344 rats (LD) [Uttamsingh et al.], 1174

halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CD) [B'chir et al.], 823

is phenylephrine or sodium bisulfite neurotoxic? (CO) [Tanaka and Nishikawa], 272

metallic mercury leak from the esophageal bougy and postoperative chest pain (CO) [Taylor and Kamaya], 548

neurologic symptom associated with a repeated injection after failed spinal anesthesia (CO) [Hirabayashi et al.], 1294

postoperative lactic acidosis in patients receiving metformin (CO) [Lustik et al.], 266

re-examination of tetrodotoxin for prolonged duration local anesthesia (LD) [Kohane et al.], 119

specific therapies of biguanide-induced lactic acidosis (CO) [Preiser and Vincent], 267, [Wulf et al.], 267

transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CD) [Freedman et al.], 633

transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Lambert], 274, [Sakura and Drasner], 274, [Rowlingson], 275

**Dwarfism**

anesthesia for cesarean section in a pituitary dwarf (CR) [Ratner and Hamilton], 253

massive pyramidal tract signs after endotracheal intubation: a case

## SUBJECT INDEX TO VOLUME 89

## Dwarfism—Electroencephalography

report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

**Dye densitogram**  
blood volume measurement at the bedside using ICG pulse spectrophotometry (CD) [Haruna et al.], 1322  
circulating blood volume measured by pulse dye-densitometry: comparison with 131I-HSA analysis (CD) [Iijima et al.], 1329

**Dysrhythmias, cardiac.** See **Arrhythmias**

**E**

**Early extubation**  
intraoperative awareness in fast-track cardiac anesthesia (CD) [Dowd et al.], 1068

**Echocardiography.** See also **Contrast echocardiography; Transesophageal echocardiography**  
comparison of left ventricular performance indices measured by transesophageal echocardiography with automated border detection (CD) [Declercq et al.], 341  
influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CD) [Aronson et al.], 1099  
intraoperative determination of cardiac output using multiplane transesophageal echocardiography: a comparison to thermodilution (CD) [Perrino et al.], 350  
left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257  
persistent alterations of the autonomic nervous system after noncardiac surgery (CI) [Amar et al.], 30  
severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780  
systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CD) [Tavernier et al.], 1313

**Economics, management, and manpower**  
distribution of anesthesia personnel in rural areas (CO) [Aldrete], 1597  
implementation of pharmaceutical practice guidelines—once again (CO) [Viby-Mogensen], 268  
method to assist in the scheduling of add-on surgical cases—upper prediction bounds for surgical case durations based on the log-normal distribution (EA) [Zhou and Dexter], 1228  
obstetric postanesthesia care unit stays: reevaluation of discharge criteria after regional anesthesia (EA) [Cohen et al.], 1557  
pharmaceutical practice guidelines: do they actually cost money? (CO) [Lubarsky], 270, [Fisher and Kelley], 269

**Editorial views**  
AMPA/kainate receptor antagonists as novel analgesic agents (EV) [Brennan], 1049  
anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289  
assessing fluid responsiveness by the systolic pressure variation in mechanically ventilated patients (EV) [Perel], 1309  
blood volume measurement: the next intraoperative monitor? (EV) [Barker], 1310  
choice of  $\alpha$ -stat or  $\text{pH}$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5  
clinical simulation: technical novelty or innovation in education (EV) [Murray], 1

does size matter? (EV) [Bouillon and Shafer], 557  
EEGs, EEG processing, and the bispectral index (EV) [Todd], 815  
emergency informed consent (EV) [Pearson], 1047  
the Internet: where do we want to go tomorrow? (EV) [Eisenach and Todd], 815  
jugular venous hemoglobin desaturation during rewarming on cardiopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3  
occupational latex allergy: the end of innocence (EV) [Holzman and Katz], 287  
plagiarism (EV) [Todd], 1307  
receptor-specific reversible sedation: beginning of new era of anesthesia? (EV) [Talke], 560

**Education**  
Abrams and Grande (eds.), *Trauma Anesthesia and Critical Care of Neurological Injury* (EM) [Pitter], 1301  
assessment of clinical performance during simulated crises using both technical and behavioral ratings (CD) [Gaba et al.], 8  
clinical simulation: technical novelty or innovation in education (EV) [Murray], 1  
Faria (ed.), *Medical Warrior: Fighting Corporate Socialized Medicine* (EM) [Speight], 1043  
the Internet: a practical guide for anesthesiologists (SA) [Ruskin], 1003  
*ITACCS (International Trauma Anesthesia and Critical Care Society)* (WS) [McCunn], 554  
medical information on the Internet (SA) [Rampil], 1233  
20th Annual Spring Meeting and Workshops of the Society for Education in Anesthesia (SM) [Mets], 807  
virtue, ethics, and anesthesia (CO) [Wasnick], 537

**Electrocardiography**  
effects of sevoflurane on QT interval in a patient with congenital long QT syndrome (CR) [Gallagher et al.], 1569  
epidural bupivacaine-morphine analgesia versus patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CD) [Boylan et al.], 585  
evoked potential monitoring and EKG: a case of a serious "cardiac arrhythmia" (CR) [Diachun et al.], 1270  
external chest wall stimulation to suppress a permanent transvenous pacemaker in a patient during endovascular stent graft placement (CR) [Moskowitz et al.], 531  
influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CD) [Aronson et al.], 1099  
third degree heart block and asystole associated with spinal anesthesia (CR) [Jordi et al.], 257

**Electrocautery**  
airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576

**Electroconvulsive therapy**  
sumatriptan was effective in electroconvulsive therapy (ECT) headache (CO) [Oms et al.], 1291

**Electroencephalography**  
anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289  
bispectral EEG index during nitric oxide administration (CD) [Rampil et al.], 671  
differential effects of anesthetic agents on outcome from near-com-

plete but not incomplete global ischemia in the rat (LD) [Miura et al.], 391

EEGs, EEG processing, and the bispectral index (EV) [Todd], 815

primer for EEG signal processing in anesthesia (RA) [Rampil], 980

quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CD) [Alkire], 323

unreasonable low BIS values in a volunteer with genetically determined low voltage EEG (CO) [Schnider et al.], 1607

**Electrophysiology**

effects of volatile anesthetics on atrial and AV nodal electrophysiological properties in guinea pig isolated perfused heart (LD) [Pekka Raatikainen et al.], 434

thiopental alters contraction, intracellular  $Ca^{2+}$ , and pH in rat ventricular myocytes (LD) [Kanaya et al.], 202

thiopental inhibits increases in  $[Ca^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LD) [Zhan et al.], 456

**Embolism, cerebral.** *See Cerebral embolism*

**Embolism, fat.** *See Fat embolism*

**Embolism, pulmonary.** *See Pulmonary embolism*

**Emergency anesthesia**

emergency informed consent (EV) [Pearson], 1047

emergent airway management at a remote hospital location in a patient wearing a halo traction device (CO) [Cohn et al.], 545

emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin [Koster et al.], 777

**Endobronchial tubes**

displacement of double-lumen tubes after patient positioning (CO) [Cheng et al.], 1282, [Klein and Karzai], 1283

**Endocrinology and metabolism**

renal nerves are not involved in sodium and water retention during mechanical ventilation in awake dogs (LD) [Boemke et al.], 942

tryptase levels are not increased during vancomycin-induced anaphylactoid reactions (CI) [Renz et al.], 620

**Endoscopy**

problem in measuring the area of the pharynx endoscopically (CO) [Isono], 542, [Nakura et al.], 541

**Endotracheal intubation.** *See also Intubation*

foreign body in the trachea originated from the inner wall of the univent tube (CO) [Harioka et al.], 1596

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

new double intrabronchial tube (Naruke tube) for tracheostomized patients (CO) [Saito et al.], 1038

use of inhaled sevoflurane for endotracheal intubation in epiglottitis (CR) [Spalding and Ala-Kokko], 1025

vocal cordal bowing as a cause of long-lasting hoarseness after a few hours of tracheal intubation (CR) [Shimokojin et al.], 785

**Enflurane**

repetitive post-training exposure to enflurane modifies spatial memory in mice (LD) [Komatsu et al.], 1184

**Epidual anesthesia and analgesia**

anesthesia for cesarean section in a pituitary dwarf (CR) [Ratner and Hamilton], 253

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

bupivacaine 0.01% and/or epinephrine 0.5  $\mu$ g/ml improve epidural fentanyl analgesia after cesarean section (CD) [Cohen et al.], 1354

does anesthesiology, like history, repeat itself? (CO) [Joos and Van Steenberge], 542, [Eisenach and D'Angelo], 542

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

effect of epidural fentanyl on neonatal respiration (CI) [Porter et al.], 79

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CI) [Wang et al.], 1414

pressure-guided method for identification of the epidural space in children (CO) [Suwa et al.], 546

randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CD) [Gambling et al.], 1336

source of epidural infection following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

transmural pressure of epidural veins in the thoracic and lumbar spine of pigs (LD) [Nystrom et al.], 449

**Epiglottis**

post-transplant lymphoproliferative disease may present with severe airway obstruction (CR) [Hammer et al.], 263

**Epiglottitis.** *See also Airway management*

use of inhaled sevoflurane for endotracheal intubation in epiglottitis (CR) [Spalding and Ala-Kokko], 1025

**Epinephrine**

dobutamine antagonizes epinephrine's biochemical and cardiotonic effects: results of an *in vitro* model using human lymphocytes and a clinical study in patients recovering from cardiac surgery (CD) [Prielipp et al.], 49

re-examination of tetrodotoxin for prolonged duration local anesthesia (LD) [Kohane et al.], 119

**Equipment and technology**

accidental intravascular placement of a feeding tube (CR) [Düthorn et al.], 251

another cause of a prolonged downstroke in the capnograph (CO) [Ti and Dhara], 801

blood loss from a defective needleless arterial sampling port (CO) [Michelsen and Zaffer], 275

blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322

circulating blood volume measured by pulse dye-densitometry: comparison with 131I-HSA analysis (CI) [Iijima et al.], 1329

complication of Bullard laryngoscope: dislodgement of tip-extender resulting in an upper airway foreign body (CO) [Marshall and James], 1604

defeating proprietary technology (CO) [Krock and Padda], 1292

electrical fires in Hewlett-Packard monitors due to saline contamination (CR) [Reynolds et al.], 521

## SUBJECT INDEX TO VOLUME 89

## Equipment and technology—Gas chromatography

Flexiguide intubation guide to facilitate airway management with WuScope system (CO) [O'Neill et al.], 545

is your pulmonary artery catheter shedding? (CO) [Erb and Ramsay], 543, [Olhoeft], 544, [Moore], 544

laryngeal mask airway fitted over a tracheotomy orifice: a mean to ventilate a tracheotomized patient during induction of anesthesia (CO) [Morita and Takenoshita], 1295

new double intrabronchial tube (Naruke tube) for tracheostomized patients (CO) [Saito et al.], 1038

primer for EEG signal processing in anesthesia (RA) [Rampil], 980

prospective evaluation of clinical tests for placement of laryngeal mask airways (CI) [Joshi et al.], 1141

pulse oximetry probe adhesive disks: a potential for infant aspiration (CO) [Reddy and Cook-Sather], 1603

unusual cause of intravenous catheter obstruction (CO) [Stone and Leon], 276

use of a guide wire to facilitate tracheal intubation with the Bullard laryngoscope (CO) [Ringwalt], 805

**Esophageal bougie**

metallic mercury leak from the esophageal bougy and postoperative chest pain (CO) [Taylor and Kamaya], 548

**Ethics**

informed consent and "reform" Jehovah's Witness patients (CO) [Doyle], 537

virtue, ethics, and anesthesia (CO) [Wasnick], 537

**Etomidate**

effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

oral etomidate (CO) [Lauretti], 1280, [Streisand], 1281

unexpected arousal effect of etomidate in a patient on high-dose steroids (CR) [Ilbeigi et al.], 1587

**Evoked potentials**

effect of isoflurane on the auditory steady-state response and on consciousness in human volunteers (CI) [Plourde et al.], 844

evoked potential monitoring and EKG: a case of a serious "cardiac arrhythmia" (CR) [Diachun et al.], 1270

**Excitatory amino acids**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

AMPA/kainate receptor antagonists as novel analgesic agents (EV) [Brennan], 1049

**Expired gas analysis**

method for measuring carbon dioxide at the tracheal stoma (CO) [Williams et al.], 799

severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780

**Extracorporeal membrane oxygenation**

nitric oxide inhibits neutrophil adhesion during experimental extracorporeal circulation (LI) [Chello et al.], 443

**F**

**Fat embolism**

early fat embolism after liposuction (CO) [Fourme et al.], 782

fatal pulmonary fat embolism in early postoperative period (CR) [Heine et al.], 1589

**Fentanyl**

cerebral blood flow and CO<sub>2</sub> reactivity is similar during remifentanil/N<sub>2</sub>O and fentanyl/N<sub>2</sub>O anesthesia (CI) [Ostapkovich et al.], 358

concentration-response relationships for fentanyl and sufentanil in patients undergoing coronary artery bypass grafting (CI) [Thomson et al.], 852

differential effects of fentanyl and morphine on intracellular Ca<sup>2+</sup> transients and contraction in rat ventricular myocytes (LI) [Kanay et al.], 1532

effect of epidural fentanyl on neonatal respiration (CI) [Porter et al.], 79

**Fetal/neonatal function and disease**

assessment of teratogenic effects of lidocaine in rat embryos (LI) [Fujinaga], 1553

effect of epidural fentanyl on neonatal respiration (CI) [Porter et al.], 79

**Fiberoptic bronchoscopy**

displacement of double-lumen tubes after patient positioning (CO) [Cheng et al.], 1282, [Klein and Karzai], 1283

**Fiberoptic intubation**

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

**Fires**

airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576

electrical fires in Hewlett-Packard monitors due to saline contamination (CR) [Reynolds et al.], 521

rare cause of fire in the operating room (CO) [Ortega], 1608

**FK506**

treatment of normal skeletal muscle with FK506 or rapamycin results in halothane-induced muscle contracture (LI) [Brooks-bank et al.], 693

**Fluorocarbons**

treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecral prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Forskolin**

differential effect of halothane and forskolin on platelet cytosolic Ca<sup>2+</sup> mobilization and aggregation (LI) [Corbin et al.], 401

**G**

**GABA and GABA receptors**

effects of intravenous general anesthetics on [<sup>3</sup>H]GABA release from rat cortical synaptosomes (LI) [Murugaiah and Hemmings], 919

isobolographic analysis of the interactions between midazolam and propofol at GABA<sub>A</sub> receptors in embryonic mouse neurons (LI) [McAdam et al.], 1444

unexpected arousal effect of etomidate in a patient on high-dose steroids (CR) [Ilbeigi et al.], 1587

**Gas anesthesia and anesthetics**

bispectral EEG index during nitric oxide administration (CI) [Rampil et al.], 671

**Gas chromatography**

partition coefficients of volatile anesthetics in aqueous electrolyte solutions at various temperatures (LR) [Hönemann et al.], 1032

**Gas exchange**

atelectasis and gas exchange after cardiac surgery (CI) [Tenling et al.], 371  
 does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089  
 exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LI) [Verbrugge et al.], 467  
 intermittent CPAP: a new mode of ventilation during general anesthesia (CI) [Bratzke et al.], 334  
 severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780  
 temperature correction of the calculated alveolar oxygen tension (CO) [Habibzadeh and Yadollahie], 1042  
 treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecal prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Gene expression**

differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961

**Genetic diseases**

general anesthesia for a patient with centronuclear (myotubular) myopathy (CR) [Gottschalk et al.], 1018

**Genetics**

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509  
*Online Mendelian Inheritance in Man* (WS) [Oyston], 811

**Glutamate and glutamate receptors**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060  
 effects of intrathecral NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LI) [Nishiyama et al.], 715  
 thiopental inhibits increases in  $[Ca^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

**G-proteins**

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209  
 halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LI) [Kai et al.], 1543

**H****Halogenated agents**

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191

**Halothane**

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509  
 comparison of the respiratory effects of sevoflurane and halothane in infants and young children (CI) [Brown et al.], 86  
 differential effect of halothane and forskolin on platelet cytosolic  $Ca^{2+}$  mobilization and aggregation (LI) [Corbin et al.], 401  
 effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated re-

sponses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

flow-induced dilation of rat coronary microvessels is attenuated by isoflurane but enhanced by halothane (LI) [Park et al.], 132  
 halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524

halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LI) [Kai et al.], 1543  
 role of intracellular  $Ca^{2+}$  stores in the inhibitory effect of halothane on airway smooth muscle contraction (LI) [Yamakage et al.], 165

single-breath vital capacity rapid inhalation induction in children: 8% sevoflurane versus 5% halothane (CI) [Agnor et al.], 379

treatment of normal skeletal muscle with FK506 or rapamycin results in halothane-induced muscle contracture (LI) [Brooks-bank et al.], 693

volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LI) [Wolfe et al.], 174

volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

**Headache**

sumatriptan was effective in electroconvulsive therapy (ECT) headache (CO) [Oms et al.], 1291

**Heart arrhythmias. See Arrhythmias****Heart block**

third degree heart block and asystole associated with spinal anesthesia (CR) [Jordi et al.], 257

**Heart dysrhythmias. See Arrhythmias****Heart failure**

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hettick et al.], 1166

dexmedetomidine produces similar alterations in the determinants of left ventricular afterload in conscious dogs before and after the development of pacing-induced cardiomyopathy (LI) [Pagan et al.], 741

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191

**Heart function and disease. See also Cardiovascular function and disease**

assessing fluid responsiveness by the systolic pressure variation in mechanically ventilated patients (EV) [Perel], 1309

comparison of left ventricular performance indices measured by transesophageal echocardiography with automated border detection (CI) [Declerk et al.], 341

dexmedetomidine produces similar alterations in the determinants of left ventricular afterload in conscious dogs before and after the development of pacing-induced cardiomyopathy (LI) [Pagan et al.], 741

differential effects of fentanyl and morphine on intracellular  $Ca^{2+}$  transients and contraction in rat ventricular myocytes (LI) [Kanay et al.], 1532

early hemodynamic changes following emergency mitral valve replacement for traumatic mitral insufficiency following bal-

## SUBJECT INDEX TO VOLUME 89

## Heart function and disease—Hypothermia

loon mitral valvotomy: report of six cases (CR) [Tempe et al.], 1583

effects of respiratory alkalosis and acidosis on myocardial blood flow and metabolism in patients with coronary artery disease (CD) [Kazmaier et al.], 831

effects of sevoflurane on QT interval in a patient with congenital long QT syndrome (CR) [Gallagher et al.], 1569

effects of volatile anesthetics on atrial and AV nodal electrophysiological properties in guinea pig isolated perfused heart (LI) [Pekka Raatikainen et al.], 434

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Aronson et al.], 1099

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191

no evidence of ischemic preconditioning during coronary revascularization (CO) [Lennon], 1601

perfuse or precondition? (CO) [Lennon], 1600

systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CI) [Tavernier et al.], 1313

third degree heart block and asystole associated with spinal anesthesia (CR) [Jordi et al.], 257

volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

**Heart rate variability**

- heart rate variability during chemical thoracic sympathectomy (CD) [Hirose et al.], 666
- persistent alterations of the autonomic nervous system after noncardiac surgery (CI) [Amar et al.], 30

**Heart rhythm and dysrhythmias. See also Arrhythmias**

- effects of volatile anesthetics on atrial and AV nodal electrophysiological properties in guinea pig isolated perfused heart (LI) [Pekka Raatikainen et al.], 434
- external chest wall stimulation to suppress a permanent transvenous pacemaker in a patient during endovascular stent graft placement (CR) [Moskowitz et al.], 531

**Hemodynamics. See Circulatory physiology and hemodynamics**

**Hemoglobin desaturation**

- jugular venous hemoglobin desaturation during rewarming on cardiopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3

**Hemostasis. See Blood coagulation**

**Heparin**

- emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777
- intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567

**Hepatic blood flow**

- blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322
- effects of intraabdominally insufflated carbon dioxide and elevated intraabdominal pressure on splanchnic circulation: an experimental study in pigs (LI) [Blobner et al.], 475

**Hiccups**

- idiopathic chronic hiccup (ICH): phrenic nerve block is not the way to go (CO) [Okuda et al.], 1285, [Petroianu], 1284

**Histamine**

- diphenhydramine increases ventilatory drive during alfentanil infusion (CI) [Babenco et al.], 642
- low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345
- severe anaphylactic reaction due to a chlorhexidine-impregnated central venous catheter (CO) [Terazawa et al.], 1296
- tryptase levels are not increased during vancomycin-induced anaphylactoid reactions (CI) [Renz et al.], 620

**History**

- cardiac massage: a method rescued from oblivion (SA) [Juvin and J-M Desmonts], 771
- the centennial of spinal anesthesia (SA) [Wulf], 500
- Henry K. Beecher, M.D.: an historical perspective? (CO) [Bacon], 792, [Gravenstein], 794
- legacy of Atropos, the Fate who cut the thread of life (SA) [Holzman], 241

**Host defense**

- effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

**Hyperalgesia**

- AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060
- AMPA/kainate receptor antagonists as novel analgesic agents (EV) [Brennan], 1049
- low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345
- peripheral analgesic effects of ketamine in acute inflammatory pain (CI) [Pedersen et al.], 58
- peripheral morphine administration blocks the development of hyperalgesia and allodynia after bone damage in the rat (LI) [Houghton et al.], 190

**Hypertension, pulmonary. See Pulmonary hypertension**

**Hyperthermia**

- paralysis only slightly reduces the febrile response to interleukin-2 during isoflurane anesthesia (CI) [Lanharter et al.], 648
- proposal for new temperature monitoring and thermal management guidelines (CO) [Sessler], 1298

**Hypothermia**

- anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289
- choice of  $\alpha$ -stat or  $pH$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5
- comparison of  $pH$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110
- effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CI) [Alfonsi et al.], 43
- effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133
- hypercapnia prevents jugular bulb desaturation during rewarming

from hypothermic cardiopulmonary bypass (CI) [Hänel et al.], 19

jugular venous hemoglobin desaturation during rewarming on cardiopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3

non-thermoregulatory shivering in patients recovering from isoflurane or desflurane anesthesia (CI) [Horn et al.], 878

**Hypoxia**

- carotid body chemoreceptor function is impaired by vecuronium during hypoxia (LI) [Wyon et al.], 1471
- choice of  $\alpha$ -stat or  $pH$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5
- comparison of  $pH$ -stat and alpha-stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110
- diphenhydramine increases ventilatory drive during alfentanil infusion (CI) [Babenco et al.], 642
- effects of alfentanil on the ventilatory response to sustained hypoxia (CI) [Cartwright et al.], 612
- hypoxic apnea, epidural anesthesia, and infants (CO) [Gunter], 1285, [Hogan], 1286
- inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157
- treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecal prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Hypoxic pulmonary vasoconstriction**

- phenylephrine and inhaled nitric oxide (CO) [Troncy and Blaise], 538, [Doering et al.], 539

**I****Spinal anesthesia and analgesia**

- intrathecal adenosine administration (CI) [Rane et al.], 1108
- intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493
- intrathecal sufentanil dose response in nulliparous patients (CI) [Arkoosh et al.], 364
- intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CI) [Riley et al.], 73
- lumbosacral cerebrospinal fluid volume is the primary determinant of sensory block extent and duration during spinal anesthesia (CD) [Carpenter et al.], 24
- multi-center study of intrathecal neostigmine for analgesia following vaginal hysterectomy (CI) [Lauretti et al.], 913
- neurologic symptom associated with a repeated injection after failed spinal anesthesia (CO) [Hirabayashi et al.], 1294
- randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CI) [Gamble et al.], 1336
- Streptococcus salivarius* meningitis after spinal anesthesia (CR) [Laurila et al.], 1579
- third degree heart block and asystole associated with spinal anesthesia (CR) [Jordi et al.], 257
- total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CI) [Freedman et al.], 633

transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Rowlingson], 275, [Sakura and Drasner], 274, [Lambert], 274

**Imaging and radiology**

- atelectasis and gas exchange after cardiac surgery (CI) [Tenling et al.], 371
- bowing of the needle technique for nerve block (CO) [Kirkpatrick et al.], 1606
- lumbosacral cerebrospinal fluid volume is the primary determinant of sensory block extent and duration during spinal anesthesia (CI) [Carpenter et al.], 24
- quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

**Immunology and inflammation. See also Immunomodulation**

- differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961
- intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125
- post-transplant lymphoproliferative disease may present with severe airway obstruction (CR) [Hammer et al.], 263
- prevalence of latex allergy among anesthesiologists: identification of sensitized but asymptomatic individuals (CI) [Brown et al.], 292

**Immunomodulation**

- effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218
- effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133

**Immunosuppressive therapy**

- post-transplant lymphoproliferative disease may present with severe airway obstruction (CR) [Hammer et al.], 263

**Indicator dilution**

- blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322

**Infection and infectious diseases**

- intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125
- multicenter study of contaminated percutaneous injuries in anesthesia personnel (CI) [Greene et al.], 1362
- source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254
- Streptococcus salivarius* meningitis after spinal anesthesia (CR) [Laurila et al.], 1579

**Inflammation**

- hyperprolactinemia in patients with noninfectious SIRS and pulmonary dysfunction associated with cardiopulmonary bypass (CI) [Hensel et al.], 93

**Information systems**

- medical information on the Internet (SA) [Rampil], 1233
- method to assist in the scheduling of add-on surgical cases—upper prediction bounds for surgical case durations based on the log-normal distribution (EA) [Zhou and Dexter], 1228

**Informed consent**

- emergency informed consent (EV) [Pearson], 1047

## SUBJECT INDEX TO VOLUME 89

## Informed consent—Intravenous anesthesia and anesthetics

informed consent and "reform" Jehovah's Witness patients (CO) [Doyle], 537

**Inhalation anesthesia and anesthetics**

anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289

anesthetic-induced alteration of  $\text{Ca}^{2+}$  homeostasis in neural cells: a temperature-sensitive process that is enhanced by blockade of plasma membrane  $\text{Ca}^{2+}$ -ATPase isoforms (LI) [Franks et al.], 149

antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CI) [Song et al.], 838

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LI) [Gomez de Segura et al.], 1489

cerebellar nitric oxide is increased during isoflurane anesthesia compared to halothane anesthesia: a microdialysis study in rats (LI) [Loeb et al.], 723

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509

differential effect of halothane and forskolin on platelet cytosolic  $\text{Ca}^{2+}$  mobilization and aggregation (LI) [Corbin et al.], 401

differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

effects of sevoflurane and isoflurane on renal function and on possible markers of nephrotoxicity (CI) [Higuchi et al.], 307

effects of sevoflurane on QT interval in a patient with congenital long QT syndrome (CR) [Gallagher et al.], 1569

effects of volatile anesthetics on atrial and AV nodal electrophysiological properties in guinea pig isolated perfused heart (LI) [Pekka Raatikainen et al.], 434

fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propene (compound A)-derived mercaptopyrurates in male Fischer 344 rats (LI) [Uttamsingh et al.], 1174

halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524

halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LI) [Kai et al.], 1543

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CI) [Segawa et al.], 1407

isoflurane and sevoflurane induce vasodilation of cerebral vessels via ATP-sensitive  $\text{K}^+$  channel activation (LI) [Iida et al.], 954

local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane versus isoflurane anesthesia in rats (LI) [Lenz et al.], 1480

mechanisms of isoflurane-increased submaximum  $\text{Ca}^{2+}$ -activated force in rabbit skinned femoral arterial strips (LI) [Toda and Sui], 731

mechanistic aspects of carbon monoxide formation from volatile anesthetics (LI) [Baxter et al.], 929

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LI) [Ebert et al.], 1524

repetitive post-training exposure to enflurane modifies spatial memory in mice (LI) [Komatsu et al.], 1184

single-breath vital capacity rapid inhalation induction in children: 8% sevoflurane versus 5% halothane (CI) [Agnor et al.], 379

**Inotropic drugs**

differential effects of fentanyl and morphine on intracellular  $\text{Ca}^{2+}$  transients and contraction in rat ventricular myocytes (LI) [Kanay et al.], 1532

**Institutional Review Board**

emergency informed consent (EV) [Pearson], 1047

**Interleukins**

effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133

paralysis only slightly reduces the febrile response to interleukin-2 during isoflurane anesthesia (CI) [Lanhardt et al.], 648

**Internet. See also Web site reviews**

the Internet: a practical guide for anesthesiologists (SA) [Ruskin], 1003

the Internet: where do we want to go tomorrow? (EV) [Eisenach and Todd], 815

medical information on the Internet (SA) [Rampil], 1233

*World Anesthesia Online* (WS) [Oyston], 280

**Intracellular calcium. See Calcium and calcium channels**

**Intrathecal anesthesia**

cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074

effects of intrathecal NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LI) [Nishiyama et al.], 715

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LI) [Saito et al.], 1455

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

intrathecal sufentanil dose response in nulliparous patients (CI) [Arkoosh et al.], 364

intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CI) [Riley et al.], 73

role of spinal NO in antiallodynic effect of intrathecal clonidine in neuropathic rats (LI) [Pan et al.], 1518

spinal nitric oxide mediates antinociception from intravenous morphine (LI) [Song et al.], 215

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

**Intrathecal pump**

illicit substance abuse via an implanted intrathecal pump (CR) [Burton et al.], 1264

**Intravenous access**

defeating proprietary technology (CO) [Krock and Padda], 1292

**Intravenous anesthesia and anesthetics**

anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289

antiemetic activity of propofol after sevoflurane and desflurane an-

esthesia for outpatient laparoscopic cholecystectomy (CI) [Song et al.], 838

cerebral blood flow and  $\text{CO}_2$  reactivity is similar during remifentanil/ $\text{N}_2\text{O}$  and fentanyl/ $\text{N}_2\text{O}$  anesthesia (CI) [Ostapkovich et al.], 358

differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391

effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

effects of intravenous general anesthetics on [ $^3\text{H}$ ]GABA release from rat cortical synaptosomes (LI) [Murugaiah and Hemmings], 919

formulation-dependent brain and lung distribution kinetics of propofol in rats (LI) [Dutta and Ebling], 678

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

is lack of statistical power always evidence of lack of effect? (CO) [Tommasino], 798, [Warner and Dexter], 799

isobolographic analysis of the interactions between midazolam and propofol at  $\text{GABA}_A$  receptors in embryonic mouse neurons (LI) [McAdam et al.], 1444

nefiracetam prevents propofol-induced anterograde and retrograde amnesia in the rodent without compromising quality of anesthesia (LI) [O'Gorman et al.], 699

pharmacodynamic interaction between propofol and fentanyl with respect to the suppression of somatic or hemodynamic responses to skin incision, peritoneum incision, and abdominal wall retraction (CI) [Kazama et al.], 894

prolonged loss of consciousness and elevated porphyrins following propofol administrations (CR) [Asirvatham et al.], 1029

propofol-induced increase in vascular capacitance is due to inhibition of sympathetic vasoconstrictive activity (LI) [Hoka et al.], 1495

quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

receptor-specific reversible sedation: beginning of new era of anesthesia? (EV) [Talke], 560

spinal nitric oxide mediates antinociception from intravenous morphine (LI) [Song et al.], 215

temperature of propofol does not reduce the incidence of injection pain (CO) [Ozturk et al.], 1041

thiopental inhibits increases in  $[\text{Ca}^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

unexpected arousal effect of etomidate in a patient on high-dose steroids (CR) [Ilbigei et al.], 1587

**Intubation.** See also **Airway management; Endotracheal intubation**

Flexiguide intubation guide to facilitate airway management with WuScope system (CO) [O'Neill et al.], 545

pediatric-nasotracheal intubation made atraumatic (CO) [Elwood et al.], 550

tongue rings: just say no (CO) [Mandabach et al.], 1279, [Rosenberg et al.], 1279

**Ions and ion channels.** See also **Calcium and calcium channels**

anesthetic-induced alteration of  $\text{Ca}^{2+}$  homeostasis in neural cells: a temperature-sensitive process that is enhanced by blockade of plasma membrane  $\text{Ca}^{2+}$ -ATPase isoforms (LI) [Franks et al.], 149

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

**Ischemia-reperfusion injury**

magnesium and cardiovascular disease (MI) [Gomez], 222

**Isobolographic analysis**

comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CI) [Naguib et al.], 1116

isobolographic analysis of the interactions between midazolam and propofol at  $\text{GABA}_A$  receptors in embryonic mouse neurons (LI) [McAdam et al.], 1444

**Isoflurane**

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LI) [Gomez de Segura et al.], 1489

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Herrick et al.], 1166

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209

effects of sevoflurane and isoflurane on renal function and on possible markers of nephrotoxicity (CI) [Higuchi et al.], 307

flow-induced dilation of rat coronary microvessels is attenuated by isoflurane but enhanced by halothane (LI) [Park et al.], 132

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CI) [Segawa et al.], 1407

isoflurane and sevoflurane induce vasodilation of cerebral vessels via ATP-sensitive  $\text{K}^+$  channel activation (LI) [Iida et al.], 954

isoflurane-induced dilation of porcine coronary arterioles is mediated by ATP-sensitive potassium channels (LI) [Zhou et al.], 182

local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane *versus* isoflurane anesthesia in rats (LI) [Lenz et al.], 1480

mechanisms of isoflurane-increased submaximum  $\text{Ca}^{2+}$ -activated force in rabbit skinned femoral arterial strips (LI) [Toda and Su], 731

non-thermoregulatory shivering in patients recovering from isoflurane or desflurane anesthesia (CI) [Horn et al.], 878

paralysis only slightly reduces the febrile response to interleukin-2 during isoflurane anesthesia (CI) [Lanhardt et al.], 648

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LI) [Ebert et al.], 1524

volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LI) [Wolfe et al.], 174

volatile anesthetics do not alter bradykinin-induced release of nitric oxide or l-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

## SUBJECT INDEX TO VOLUME 89

## Jewelry—Lidocaine

**J****Jewelry**

tongue rings: just say no (CO) [Mandabach et al.], 1279, [Rosenberg et al.], 1279

**Joint replacement surgery**

acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290

fatal pulmonary fat embolism in early postoperative period (CR) [Heine et al.], 1589

**K****Ketamine**

anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289

differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391

effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

oral ketamine for the management of combative autistic adult (CO) [Bachenberg], 549

peripheral analgesic effects of ketamine in acute inflammatory pain (CI) [Pedersen et al.], 58

**Kidney function and disease**

effects of hyperventilation and hypocapnic/normocapnic hypoxemia on renal function and lithium clearance in humans (CI) [Olsen et al.], 1389

effects of sevoflurane and isoflurane on renal function and on possible markers of nephrotoxicity (CI) [Higuchi et al.], 307

renal nerves are not involved in sodium and water retention during mechanical ventilation in awake dogs (LI) [Boemke et al.], 942

**L****Labor and delivery. See also Cesarean section; Obstetric anesthesia**

EXIT procedure facilitates delivery of an infant with a pretracheal teratoma (CR) [Shih et al.], 1573

randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CI) [Gambling et al.], 1336

**Lactic acidosis**

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CI) [B'chir et al.], 823

postoperative lactic acidosis in patients receiving metformin (CO) [Lustik et al.], 266

specific therapies of biguanide-induced lactic acidosis (CO) [Preiser and Vincent], 267, [Wulf et al.], 267

**Laparoscopy**

effects of intraabdominally insufflated carbon dioxide and elevated intraabdominal pressure on splanchnic circulation: an experimental study in pigs (LI) [Blobner et al.], 475

pneumothorax during endoscopic extraperitoneal herniorrhaphy (CO) [Toyoshima et al.], 1040

**Laryngeal function and disease**

laryngospasm—the best treatment (CO) [Larson], 1293

post-anesthesia paradoxical vocal cord motion successfully treated with midazolam (CR) [Roberts et al.], 517

vocal cordal bowing as a cause of long-lasting hoarseness after a few hours of tracheal intubation (CR) [Shimokojin et al.], 785

**Laryngeal mask airway**

laryngeal mask airway fitted over a tracheotomy orifice: a mean to ventilate a tracheotomized patient during induction of anesthesia (CO) [Morita and Takenoshita], 1295

prospective evaluation of clinical tests for placement of laryngeal mask airways (CI) [Joshi et al.], 1141

**Laryngoscopy**

complication of Bullard laryngoscope: dislodgement of tip-extender resulting in an upper airway foreign body (CO) [Marshall and James], 1604

Flexiguide intubation guide to facilitate airway management with WuScope system (CO) [O'Neill et al.], 545

use of a guide wire to facilitate tracheal intubation with the Bullard laryngoscope (CO) [Ringwalt], 805

**Laryngospasm**

laryngospasm—the best treatment (CO) [Larson], 1293

**Laser Doppler flowmetry**

skin vasomotor reflex as a measure of depth of anesthesia (CO) [Ezri et al.], 1281, [Shimoda], 1282

**Latex allergy**

occupational latex allergy: the end of innocence (EV) [Holzman and Katz], 287

prevalence of latex allergy among anesthesiologists: identification of sensitized but asymptomatic individuals (CI) [Brown et al.], 292

**Learning**

repetitive post-training exposure to enflurane modifies spatial memory in mice (LI) [Komatsu et al.], 1184

**Left ventricle**

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

**Leukocyte adhesion**

nitric oxide inhibits neutrophil adhesion during experimental extra-corporeal circulation (LI) [Chello et al.], 443

**Levodopa**

successful perioperative management of a patient with Parkinson's disease by enteral levodopa administration under propofol anesthesia (CR) [Furuya et al.], 261

**Lidocaine**

assessment of teratogenic effects of lidocaine in rat embryos (LI) [Fujinaga], 1553

combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LI) [Saito et al.], 1455

low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345

lumbosacral cerebrospinal fluid volume is the primary determinant of sensory block extent and duration during spinal anesthesia (CD) [Carpenter et al.], 24

**Liver and disease. See also Hepatic blood flow**

halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CI) [B'chir et al.], 823

**Liver transplantation**

halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524

upper extremity veno-arterial shunting during pediatric orthotopic liver transplantation (CR) [Henderson et al.], 1247

**Local anesthesia and anesthetics. See also Regional anesthesia and anesthetics**

assessment of teratogenic effects of lidocaine in rat embryos (LI) [Fujinaga], 1553

bupivacaine 0.01% and/or epinephrine 0.5  $\mu$ g/ml improve epidural fentanyl analgesia after cesarean section (CI) [Cohen et al.], 1354

combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

Gary Strichartz: life among local anesthetics (SA) [Gelman], 820

low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345

prolonged intercostal nerve blockade in sheep using controlled-release of bupivacaine and dexamethasone from polymer microspheres (LI) [Dräger et al.], 969

re-examination of tetrodotoxin for prolonged duration local anesthesia (LI) [Kohane et al.], 119

sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LI) [Kohane et al.], 1199

total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

**Low back pain**

local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CD) [Wang et al.], 1414

**Lung, blood flow. See Pulmonary blood flow**

**Lung function and disease**

additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CD) [Germann et al.], 1401

atelectasis and gas exchange after cardiac surgery (CI) [Tenling et al.], 371

bronchospasm and "reflex right upper lobe atelectasis" (CO) [Sprung et al.], 803

carotid body chemoreceptor function is impaired by vecuronium during hypoxia (LI) [Wyon et al.], 1471

combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

diphenhydramine increases ventilatory drive during alfentanil infusion (CI) [Babenco et al.], 642

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CD) [Papazian et al.], 1089

effects of alfentanil on the ventilatory response to sustained hypoxia (CD) [Cartwright et al.], 612

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LI) [Verbrugge et al.], 467

halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LI) [Kai et al.], 1543

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157

intermittent CPAP: a new mode of ventilation during general anesthesia (CI) [Bratzke et al.], 334

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CI) [B'chir et al.], 823

phenylephrine and inhaled nitric oxide (CO) [Troncy and Blaise], 538, [Doering et al.], 539

pulmonary blood flow does not redistribute in dogs with reposition from supine to left lateral position (LI) [Mure et al.], 483

severe hypercapnia induced by acute dissecting aortic aneurysm (CR) [Lenfant et al.], 780

temperature correction of the calculated alveolar oxygen tension (CO) [Habibzadeh and Yadollahie], 1042

treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecal prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Lung injury**

exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LI) [Verbrugge et al.], 467

hyperprolactinemia in patients with noninfectious SIRS and pulmonary dysfunction associated with cardiopulmonary bypass (CI) [Hensel et al.], 93

pneumothorax during endoscopic extraperitoneal herniorrhaphy (CO) [Toyoshima et al.], 1040

tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250

transfusion-related acute lung injury (TRALI) complicating colectomy for ulcerative colitis (CR) [Keifer et al.], 1020

treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecal prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Lungs. See Lung function and disease; Lung injury; Thoracic anesthesia**

**$\beta$ -Lyase**

fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-pro-

pene (compound A)-derived mercaptopurates in male Fischer 344 rats (LD) [Uttamsingh et al.], 1174

## M

**MAC.** *See Minimum alveolar concentration*

**Macrophage aggregation**

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

**Magnesium**

magnesium and cardiovascular disease (MD) [Gomez], 222

**Magnetic resonance imaging (MRI)**

lumbosacral cerebrospinal fluid volume is the primary determinant of sensory block extent and duration during spinal anesthesia (CI) [Carpenter et al.], 24

**Malignant hyperthermia**

predicting malignant hyperthermia susceptibility (CO) [Allen], 797; [Fierobe], 798  
secretion of dantrolene into breast milk after acute therapy of a suspected malignant hyperthermia crisis during cesarean section (CR) [Fricker et al.], 1023

treatment of normal skeletal muscle with FK506 or rapamycin results in halothane-induced muscle contracture (LD) [Brookbank et al.], 693

**Mean transit time**

blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322

**Mechanical ventilation**

another cause of a prolonged downstroke in the capnograph (CO) [Ti and Dhara], 801

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CD) [Papazian et al.], 1089

intermittent CPAP: a new mode of ventilation during general anesthesia (CI) [Bratzke et al.], 334

renal nerves are not involved in sodium and water retention during mechanical ventilation in awake dogs (LD) [Boemke et al.], 942

**Mechanisms of anesthesia**

anesthetic-induced alteration of  $\text{Ca}^{2+}$  homeostasis in neural cells: a temperature-sensitive process that is enhanced by blockade of plasma membrane  $\text{Ca}^{2+}$ -ATPase isoforms (LD) [Franks et al.], 149

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LD) [Gomez de Segura et al.], 1489

cerebellar nitric oxide is increased during isoflurane anesthesia compared to halothane anesthesia: a microdialysis study in rats (LD) [Loeb et al.], 723

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LD) [van Swinderen et al.], 1509

effect of isoflurane on the auditory steady-state response and on consciousness in human volunteers (CI) [Plourde et al.], 844

effects of intravenous general anesthetics on [ $^3\text{H}$ ]GABA release from rat cortical synaptosomes (LD) [Murugaiah and Hemmings], 919

isobolographic analysis of the interactions between midazolam and propofol at  $\text{GABA}_A$  receptors in embryonic mouse neurons (LD) [McAdam et al.], 1444

quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LD) [Wolfe et al.], 174

**Medicolegal issues**

effect of group discussion on interrater reliability of structured peer review (SA) [Levine et al.], 507

**Meetings.** *See Reports of scientific meetings*

**Memory.** *See Psychology, memory, and awareness*

**Meninges, spinal.** *See Spinal meninges*

**Mental retardation**

oral ketamine for the management of combative autistic adult (CO) [Bachenberg], 549

**Meperidine**

effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CI) [Alfonsi et al.], 43

randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CI) [Gambling et al.], 1336

**Mercury**

metallic mercury leak from the esophageal bougy and postoperative chest pain (CO) [Taylor and Kamaya], 548

**Meta-analysis**

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LD) [Ebert et al.], 1524

**Metabolism, drug.** *See Drug metabolism*

**Metformin**

postoperative lactic acidosis in patients receiving metformin (CO) [Lustik et al.], 266

**N-Methyl-D-aspartate**

effects of intrathecral NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LD) [Nishiyama et al.], 715

peripheral analgesic effects of ketamine in acute inflammatory pain (CI) [Pedersen et al.], 58

**Methylmethacrylate cement**

acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290

**Microbacterial activity**

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

**Microdialysis**

cerebellar nitric oxide is increased during isoflurane anesthesia compared to halothane anesthesia: a microdialysis study in rats (LD) [Loeb et al.], 723

**Microspheres**

prolonged intercostal nerve blockade in sheep using controlled-release of bupivacaine and dexamethasone from polymer microspheres (LD) [Dräger et al.], 969

**Midazolam**

isobolographic analysis of the interactions between midazolam and propofol at  $\text{GABA}_A$  receptors in embryonic mouse neurons (LD) [McAdam et al.], 1444

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target

controlled infusion for sedation following coronary artery bypass grafting (CD) [Zomorodi et al.], 1418

post-anesthesia paradoxical vocal cord motion successfully treated with midazolam (CR) [Roberts et al.], 517

**Minimum alveolar concentration**

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LD) [Gomez de Segura et al.], 1489

lack of correlation between the reduction of sevoflurane MAC and the cerebellar cyclic GMP concentrations in mice treated with 7-nitroindazole (LD) [Ichinose et al.], 143

**Mitral valve function and disease**

early hemodynamic changes following emergency mitral valve replacement for traumatic mitral insufficiency following balloon mitral valvotomy: report of six cases (CR) [Tempe et al.], 1583

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

**Mivacurium**

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LD) [Beaufort et al.], 707

**Models and modeling**

assessment of clinical performance during simulated crises using both technical and behavioral ratings (CI) [Gaba et al.], 8

dobutamine antagonizes epinephrine's biochemical and cardiotonic effects: results of an *in vitro* model using human lymphocytes and a clinical study in patients recovering from cardiac surgery (CI) [Prielipp et al.], 49

exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LD) [Verbrugge et al.], 467

experimental determination of heat flow parameters during induction of general anesthesia (CI) [Sessler and Sessler], 657

volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LD) [Wolfe et al.], 174

**Monitoring**

anesthesia for pediatric stereotactic radiosurgery (CR) [Bauman et al.], 255

bispectral EEG index during nitric oxide administration (CI) [Rampil et al.], 671

blood volume measurement: the next intraoperative monitor? (EV) [Barker], 1310

circulating blood volume measured by pulse dye-densitometry: comparison with 131I-HSA analysis (CI) [Iijima et al.], 1329

combined use of transesophageal echocardiography and basket catheter can prevent tumor embolism in a patient with renal cell carcinoma (CR) [Tanaka et al.], 1015

comparison of left ventricular performance indices measured by transesophageal echocardiography with automated border detection (CI) [Declerk et al.], 341

continuous cardiac output catheters: delay in *in vitro* response time after controlled flow changes (LR) [Aranda et al.], 1592

EEGs, EEG processing, and the bispectral index (EV) [Todd], 815

evoked potential monitoring and EKG: a case of a serious "cardiac arrhythmia" (CR) [Diachun et al.], 1270

intraoperative determination of cardiac output using multiplane transesophageal echocardiography: a comparison to thermodilution (CI) [Perrino et al.], 350

method for measuring carbon dioxide at the tracheal stoma (CO) [Williams et al.], 799

primer for EEG signal processing in anesthesia (RA) [Rampil], 980

proposal for new temperature monitoring and thermal management guidelines (CO) [Sessler], 1298

quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CI) [Tavernier et al.], 1313

third degree heart block and asystole associated with spinal anesthesia (CR) [Jordi et al.], 257

unreasonable low BIS values in a volunteer with genetically determined low voltage EEG (CO) [Schnider et al.], 1607

**Morphine**

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LD) [Gomez de Segura et al.], 1489

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

differential effects of fentanyl and morphine on intracellular  $Ca^{2+}$  transients and contraction in rat ventricular myocytes (LD) [Kanay et al.], 1532

effects of intrathecal NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LD) [Nishiyama et al.], 715

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LD) [Saito et al.], 1464

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LD) [Saito et al.], 1455

peripheral morphine administration blocks the development of hyperalgesia and allodynia after bone damage in the rat (LD) [Houghton et al.], 190

spinal nitric oxide mediates antinociception from intravenous morphine (LD) [Song et al.], 215

**Mustard oil**

intrathecal adenosine administration (CI) [Rane et al.], 1108

**Myocardial contractility**

myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LD) [Vivien et al.], 1191

thiopental alters contraction, intracellular  $Ca^{2+}$ , and pH in rat ventricular myocytes (LD) [Kanaya et al.], 202

**Myocardial infarction**

predicting long-term postoperative cardiovascular outcomes (CO) [Litwack and DeGruttola], 1286, [Badner and Gelb], 1287, [Mangano], 1288

spontaneous recovery after discontinuation of intraoperative cardiopulmonary resuscitation: case report (CR) [Frölich], 1252

**Myocardial ischemia**

effects of atenolol on postoperative myocardial ischemia (CO) [Lusik et al.], 794

effects of respiratory alkalosis and acidosis on myocardial blood flow

## SUBJECT INDEX TO VOLUME 89

## Myocardial ischemia—Neurosurgical anesthesia

and metabolism in patients with coronary artery disease (CI) [Kazmaier et al.], 831  
 influence of collateral flow on the antegrade and retrograde distribution of cardioplegia in patients with an occluded right coronary artery (CI) [Aronson et al.], 1099  
 magnesium and cardiovascular disease (MI) [Gomez], 222  
 volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

## N

## Nasogastric tube

accidental intravascular placement of a feeding tube (CR) [Düthorn et al.], 251

## Nausea, vomiting, and antiemetics

antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CI) [Song et al.], 838  
 cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074

## Nefiracetam

nefiracetam prevents propofol-induced anterograde and retrograde amnesia in the rodent without compromising quality of anesthesia (LI) [O'Gorman et al.], 699

## Nematodes

common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509

## Neostigmine

cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074  
 intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493  
 multi-center study of intrathecal neostigmine for analgesia following vaginal hysterectomy (CI) [Lauretti et al.], 913

## Nephrotoxicity

fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propane (compound A)-derived mercaptopyrurates in male Fischer 344 rats (LI) [Uttamsingh et al.], 1174

**Nerve blocks.** See also Local anesthesia and anesthetics; Regional anesthesia safety, outcomes, and prospective study design (CO) [Price and Carpenter], 790, [Auroy et al.], 791

bowing of the needle technique for nerve block (CO) [Kirkpatrick et al.], 1606

the centennial of spinal anesthesia (SA) [Wulf], 500

cryoanalgesia: a novel treatment for hip adductor spasticity and obturator neuralgia (CR) [Kim and Ferrante], 534

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

prolonged intercostal nerve blockade in sheep using controlled release of bupivacaine and dexamethasone from polymer microspheres (LI) [Dräger et al.], 969

prospective, randomized comparison of deep or superficial cervical plexus block for carotid endarterectomy surgery (CI) [Stoneham et al.], 907

sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LI) [Kohane et al.], 1199

source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254  
*Streptococcus salivarius* meningitis after spinal anesthesia (CR) [Laurila et al.], 1579

there is no golden yardstick (CO) [Erjavec], 788  
 total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CI) [Freedman et al.], 633

transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Lambert], 274, [Sakura and Drasner], 274, [Rowlingson], 275

## Neurological injury

Abrams and Grande (eds.), *Trauma Anesthesia and Critical Care of Neurological Injury* (EM) [Pittet], 1301

## Neurologic complications

is phenylephrine or sodium bisulfite neurotoxic? (CO) [Tanaka and Nishikawa], 272

neurologic symptom associated with a repeated injection after failed spinal anesthesia (CO) [Hirabayashi et al.], 1294

transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CI) [Freedman et al.], 633

transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Sakura and Drasner], 274, [Rowlingson], 275, [Lambert], 274

## Neuromuscular transmission and blockade

carotid body chemoreceptor function is impaired by vecuronium during hypoxia (LI) [Wyon et al.], 1471

comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CI) [Naguib et al.], 1116

high concentration cisatracurium ICU solution (CO) [Nishio et al.], 1605

implementation of pharmaceutical practice guidelines—once again (CO) [Viby-Mogensen], 268

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LI) [Beaufort et al.], 707

paralysis only slightly reduces the febrile response to interleukin-2 during isoflurane anesthesia (CI) [Lanhardt et al.], 648

pharmaceutical practice guidelines: do they actually cost money? (CO) [Fisher and Kelley], 269, [Lubarsky], 270

potential cause for medication administration error (CO) [Donahue and Needleman], 800

## Neuronal electrophysiology

thiopental inhibits increases in  $[Ca^{2+}]$ , induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

## Neuropathic pain

intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493

## Neuroprotection

anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289

## Neurosurgical anesthesia

cerebral blood flow and  $CO_2$  reactivity is similar during remifentanil/

$\text{N}_2\text{O}$  and fentanyl/ $\text{N}_2\text{O}$  anesthesia (CI) [Ostapkovich et al.], 358

cerebrovascular  $\text{CO}_2$  reactivity during anesthesia in patients with diabetes mellitus and peripheral vascular disease (CI) [Kawata et al.], 887

Cottrell and Hartung (eds.), *Journal of Neurosurgical Anesthesiology* (EM) [Sperry], 278

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

prospective, randomized comparison of deep or superficial cervical plexus block for carotid endarterectomy surgery (CI) [Stoneham et al.], 907

**Neutrophils**  
nitric oxide inhibits neutrophil adhesion during experimental extracorporeal circulation (LI) [Chello et al.], 443

**Nitric oxide and nitric oxide synthase**  
bispectral EEG index during nitric oxide administration (CI) [Rampil et al.], 671

cerebellar nitric oxide is increased during isoflurane anesthesia compared to halothane anesthesia: a microdialysis study in rats (LI) [Loeb et al.], 723

flow-induced dilation of rat coronary microvessels is attenuated by isoflurane but enhanced by halothane (LI) [Park et al.], 132

lack of correlation between the reduction of sevoflurane MAC and the cerebellar cyclic GMP concentrations in mice treated with 7-nitroindazole (LI) [Ichinose et al.], 143

nitric oxide inhibits neutrophil adhesion during experimental extracorporeal circulation (LI) [Chello et al.], 443

role of spinal NO in antiallodynic effect of intrathecal clonidine in neuropathic rats (LI) [Pan et al.], 1518

spinal nitric oxide mediates antinociception from intravenous morphine (LI) [Song et al.], 215

volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

**Nitric oxide inhalation**  
additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CI) [Germann et al.], 1401

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157

phenylephrine and inhaled nitric oxide (CO) [Troncy and Blaise], 538, [Doering et al.], 539

**7-Nitroindazole**  
lack of correlation between the reduction of sevoflurane MAC and the cerebellar cyclic GMP concentrations in mice treated with 7-nitroindazole (LI) [Ichinose et al.], 143

**Nitrous oxide**  
cerebral blood flow and  $\text{CO}_2$  reactivity is similar during remifentanil/ $\text{N}_2\text{O}$  and fentanyl/ $\text{N}_2\text{O}$  anesthesia (CI) [Ostapkovich et al.], 358

population pharmacodynamics and pharmacokinetics of remifen-

tanil as a supplement to nitrous oxide anesthesia for elective abdominal surgery (CI) [Drover and Lemmens], 869

**NMDA.** See *N*-Methyl-D-aspartate

**Nociception.** See also *Antinociception*

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

**Nonlinear regression**

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

**Nonsteroidal anti-inflammatory drugs**

local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CI) [Wang et al.], 1414

peripherally administered NSAIDs provide for patient benefit (CO) [Connelly and Reuben], 276

**Norepinephrine**

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089

impact of systemic vasoconstrictors on the cerebral circulation of anesthetized patients (CI) [Strebel et al.], 67

spinal nitric oxide mediates antinociception from intravenous morphine (LI) [Song et al.], 215

**NSAIDs.** See *Nonsteroidal anti-inflammatory drugs*

**Nucleosides**

intrathecal adenosine administration (CI) [Rane et al.], 1108

## O

**Obesity**

does size matter? (EV) [Bouillon and Shafer], 557

remifentanil pharmacokinetics in obese *versus* lean patients (CI) [Egan et al.], 562

**Obstetric anesthesia**

anesthesia for cesarean section in a pituitary dwarf (CR) [Ratner and Hamilton], 253

bupivacaine 0.01% and/or epinephrine 0.5  $\mu\text{g}/\text{ml}$  improve epidural fentanyl analgesia after cesarean section (CI) [Cohen et al.], 1354

does anesthesiology, like history, repeat itself? (CO) [Eisenach and D'Angelo], 542, [Joos and Van Steenberge], 542

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

effect of adding a mididose of clonidine to intrathecal sufentanil for labor analgesia (CI) [Mercier et al.], 594

effect of epidural fentanyl on neonatal respiration (CI) [Porter et al.], 79

EXIT procedure facilitates delivery of an infant with a pretracheal teratoma (CR) [Shih et al.], 1573

intrathecal sufentanil dose response in nulliparous patients (CI) [Arkoosh et al.], 364

intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CI) [Riley et al.], 73

obstetric anesthesia 1988–1996 in Northrhine/Germany: results of

## SUBJECT INDEX TO VOLUME 89

## Obstetric anesthesia—Oxygen and oxygen transport

the perinatal survey at the chambers of physicians (CO) [Josten et al.], 1288

obstetric postanesthesia care unit stays: reevaluation of discharge criteria after regional anesthesia (EA) [Cohen et al.], 1557

randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CD) [Gambling et al.], 1336

total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

**Obstruction, airway. See Airway management**

**Operating room**

method to assist in the scheduling of add-on surgical cases—upper prediction bounds for surgical case durations based on the log-normal distribution (EA) [Zhou and Dexter], 1228

rare cause of fire in the operating room (CO) [Ortega], 1608

**Opioids**

anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

cerebral blood flow and CO<sub>2</sub> reactivity is similar during remifentanil/N<sub>2</sub>O and fentanyl/N<sub>2</sub>O anesthesia (CI) [Ostapovich et al.], 358

concentration-response relationships for fentanyl and sufentanil in patients undergoing coronary artery bypass grafting (CI) [Thomson et al.], 852

differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391

differential effects of fentanyl and morphine on intracellular Ca<sup>2+</sup> transients and contraction in rat ventricular myocytes (LI) [Kanay et al.], 1532

diphenhydramine increases ventilatory drive during alfentanil infusion (CD) [Babenco et al.], 642

does size matter? (EV) [Bouillon and Shafer], 557

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

effect of adding a minidose of clonidine to intrathecal sufentanil for labor analgesia (CD) [Mercier et al.], 594

effect of epidural fentanyl on neonatal respiration (CI) [Porter et al.], 79

effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218

effects of alfentanil on the ventilatory response to sustained hypoxia (CD) [Cartwright et al.], 612

effects of intrathecal NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LI) [Nishiyama et al.], 715

effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CD) [Alfonsi et al.], 43

efficacy and costs of patient-controlled analgesia *versus* regularly administered intramuscular opioid therapy (CI) [Choinière et al.], 1377

illicit substance abuse *via* an implanted intrathecal pump (CR) [Burton et al.], 1264

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LI) [Saito et al.], 1455

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

intrathecal sufentanil dose response in nulliparous patients (CI) [Arkoosh et al.], 364

intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CD) [Riley et al.], 73

peripheral morphine administration blocks the development of hyperalgesia and allodynia after bone damage in the rat (LI) [Houghton et al.], 190

pharmacodynamic interaction between propofol and fentanyl with respect to the suppression of somatic or hemodynamic responses to skin incision, peritoneum incision, and abdominal wall retraction (CI) [Kazama et al.], 894

population pharmacodynamics and pharmacokinetics of remifentanil as a supplement to nitrous oxide anesthesia for elective abdominal surgery (CI) [Drover and Lemmens], 869

remifentanil pharmacokinetics in obese *versus* lean patients (CI) [Egan et al.], 562

sedative and analgesic sparing effect of music (CI) [Koch et al.], 300

small doses of sufentanil will produce violent coughing in young children (CO) [Bennett et al.], 272, [Yemen], 271

spinal nitric oxide mediates antinociception from intravenous morphine (LI) [Song et al.], 215

transnasal butorphanol is effective for postoperative pain relief in children undergoing myringotomy (CI) [Bennie et al.], 385

**Orthopedic surgery**

acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290

the blood sparing effect of aprotinin should be revisited (CO) [Lentschner and Benhamou], 1598

fatal pulmonary fat embolism in early postoperative period (CR) [Heine et al.], 1589

**Ostwald partition coefficient**

partition coefficients of volatile anesthetics in aqueous electrolyte solutions at various temperatures (LR) [Hönemann et al.], 1032

**Outcomes**

predicting long-term postoperative cardiovascular outcomes (CO) [Litwack and DeGruttola], 1286, [Badner and Gelb], 1287, [Mangano], 1288

**Oxygen and oxygen transport**

additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CI) [Germann et al.], 1401

choice of  $\alpha$ -stat or  $pH$ -stat management and neurologic outcomes after cardiac surgery: it depends (EV) [Hindman], 5

comparison of  $pH$ -stat and  $\alpha$ -stat cardiopulmonary bypass on cerebral oxygenation and blood flow in relation to hypothermic circulatory arrest in piglets (LI) [Kurth et al.], 110

inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157

jugular venous hemoglobin desaturation during rewarming on car-

diopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3  
 temperature correction of the calculated alveolar oxygen tension (CO) [Habibzadeh and Yadollahie], 1042  
 tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250  
**Oxygenation, arterial.** *See Arterial oxygenation*

**P****Pacing and pacemakers**

external chest wall stimulation to suppress a permanent transvenous pacemaker in a patient during endovascular stent graft placement (CR) [Moskowitz et al.], 531

**Pain**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

AMPA/kainate receptor antagonists as novel analgesic agents (EV) [Brennan], 1049

low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345

*Worldwide Congress on Pain (WS)* [Cusick], 1304

**Pain (sympathetic or causalgic).** *See Pain; Pain mechanisms; Pain physiology and pharmacology; Sympathetic nervous system*

**Pain management**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

bowing of the needle technique for nerve block (CO) [Kirkpatrick et al.], 1606

bupivacaine 0.01% and/or epinephrine 0.5  $\mu$ g/ml improve epidural fentanyl analgesia after cesarean section (CI) [Cohen et al.], 1354

cryoanalgesia: a novel treatment for hip adductor spasticity and obturator neuralgia (CR) [Kim and Ferrante], 534

Diamond and Coniam (eds.), *The Management of Chronic Pain—Second Edition* (EM) [Crews], 809

effect of adding a mididose of clonidine to intrathecal sufentanil for labor analgesia (CI) [Mercier et al.], 594

efficacy and costs of patient-controlled analgesia *versus* regularly administered intramuscular opioid therapy (CI) [Choinière et al.], 1377

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

epigastric antinociception by cervical dorsal column lesions in rats (LI) [Feng et al.], 411

heart rate variability during chemical thoracic sympathectomy (CI) [Hirose et al.], 666

illicit substance abuse *via* an implanted intrathecal pump (CR) [Burton et al.], 1264

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LI) [Saito et al.], 1455

intrathecal adenosine administration (CI) [Rane et al.], 1108  
 intravenous regional clonidine in the management of sympathetically maintained pain (CR) [Reuben et al.], 527  
 Irving and Wallace (eds.), *Pain Management for the Practicing Physician* (EM) [Warfield], 1043  
 management of chronic nonmalignant pain (CO) [Khan], 788, [Jacobson et al.], 789  
 multi-center study of intrathecal neostigmine for analgesia following vaginal hysterectomy (CI) [Lauretti et al.], 913  
 peripheral analgesic effects of ketamine in acute inflammatory pain (CI) [Pedersen et al.], 58  
 peripherally administered NSAIDs provide for patient benefit (CO) [Connelly and Reuben], 276  
 peripheral morphine administration blocks the development of hyperalgesia and allodynia after bone damage in the rat (LI) [Houghton et al.], 190  
 postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296  
 pressure-guided method for identification of the epidural space in children (CO) [Suwa et al.], 546  
 randomized study of combined spinal-epidural analgesia *versus* intravenous meperidine during labor: impact on cesarean delivery rate (CI) [Gambling et al.], 1336  
 sedative and analgesic sparing effect of music (CI) [Koch et al.], 300  
 there is no golden yardstick (CO) [Erjavec], 788  
 transnasal butorphanol is effective for postoperative pain relief in children undergoing myringotomy (CI) [Bennie et al.], 385  
 Unknown, *The Management of Pain* (EM) [Lauretti], 1610  
**Pain mechanisms**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

intrathecal adenosine administration (CI) [Rane et al.], 1108  
 temperature of propofol does not reduce the incidence of injection pain (CO) [Ozturk et al.], 1041

**Pain physiology and pharmacology**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CI) [Sang et al.], 1060

effects of intrathecal NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LI) [Nishiyama et al.], 715

epigastric antinociception by cervical dorsal column lesions in rats (LI) [Feng et al.], 411

interaction of intrathecally infused morphine and lidocaine in rats (part I): synergistic antinociceptive effects (LI) [Saito et al.], 1455

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

intrathecal adenosine administration (CI) [Rane et al.], 1108  
 intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493

local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CI) [Wang et al.], 1414

low-dose lidocaine suppresses experimentally induced hyperalgesia in humans (CI) [Koppert et al.], 1345

## SUBJECT INDEX TO VOLUME 89

## Pain physiology and pharmacology—Pharmacokinetics and pharmacodynamics

role of spinal NO in antialloodynic effect of intrathecal clonidine in neuropathic rats (LI) [Pan et al.], 1518

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

**Pancuronium**  
implementation of pharmaceutical practice guidelines—once again (CO) [Viby-Mogensen], 268

**Parkinson's disease**  
successful perioperative management of a patient with Parkinson's disease by enteral levodopa administration under propofol anesthesia (CR) [Furuya et al.], 261

**Parturition. See also Labor and delivery; Obstetric anesthesia**

**Patient and physician safety**  
effect of group discussion on interrater reliability of structured peer review (SA) [Levine et al.], 507

electrical fires in Hewlett-Packard monitors due to saline contamination (CR) [Reynolds et al.], 521

multicenter study of contaminated percutaneous injuries in anesthesia personnel (CI) [Greene et al.], 1362

occupational latex allergy: the end of innocence (EV) [Holzman and Katz], 287

prevalence of latex allergy among anesthesiologists: identification of sensitized but asymptomatic individuals (CI) [Brown et al.], 292

rare cause of fire in the operating room (CO) [Ortega], 1608

Rom, *Fatal Extraction* (EM) [Berry], 278

**Patient-controlled analgesia**  
efficacy and costs of patient-controlled analgesia *versus* regularly administered intramuscular opioid therapy (CI) [Choinière et al.], 1377

epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585

sedative and analgesic sparing effect of music (CI) [Koch et al.], 300

**Pediatric anesthesia**  
anesthesia for pediatric stereotactic radiosurgery (CR) [Bauman et al.], 255

comparison of the respiratory effects of sevoflurane and halothane in infants and young children (CI) [Brown et al.], 86

create a party mood for a smooth anesthetic induction of children (CO) [Thiagarajah and Thiagarajah], 802

halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524

hypoxic apnea, epidural anesthesia, and infants (CO) [Hogan], 1286, [Gunter], 1285

massive pyramidal tract signs after endotracheal intubation: a case report of spondyloepiphyseal dysplasia congenita (CR) [Redl], 1262

oral etomidate (CO) [Streisand], 1281, [Lauretti], 1280

parental presence during induction of anesthesia *versus* sedative premedication: which intervention is more effective? (CI) [Kain et al.], 1147

pediatric-nasotracheal intubation made atraumatic (CO) [Elwood et al.], 550

Peutrell and Mather (eds.), *Regional Anesthesia for Babies and Children* (EM) [Lönnqvist], 551

pressure-guided method for identification of the epidural space in children (CO) [Suwa et al.], 546

pulse oximetry probe adhesive disks: a potential for infant aspiration (CO) [Reddy and Cook-Sather], 1603

replacement of air by carbon dioxide (CO) [Rosen], 1036, [O'Brien], 1036

single-breath vital capacity rapid inhalation induction in children: 8% sevoflurane *versus* 5% halothane (CI) [Agnor et al.], 379

small doses of sufentanil will produce violent coughing in young children (CO) [Yemen], 271, [Bennett et al.], 272

transnasal butorphanol is effective for postoperative pain relief in children undergoing myringotomy (CI) [Bennie et al.], 385

upper extremity veno-arterial shunting during pediatric orthotopic liver transplantation (CR) [Henderson et al.], 1247

**Perfusion pressure**  
effect of various lithotomy positions on lower-extremity blood pressure (CI) [Halliwill et al.], 1373

**Personnel issues. See Economics, management, and manpower**

**Phagocytosis**  
intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

**Pharmacodynamics. See Pharmacokinetics and pharmacodynamics**

**Pharmacokinetics and pharmacodynamics**  
antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CI) [Song et al.], 838

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CI) [Shafer et al.], 1074

comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CI) [Naguib et al.], 1116

concentration-response relationships for fentanyl and sufentanil in patients undergoing coronary artery bypass grafting (CI) [Thomson et al.], 852

diphenhydramine increases ventilatory drive during alfentanil infusion (CI) [Babenco et al.], 642

does size matter? (EV) [Bouillon and Shafer], 557

effects of alfentanil on the ventilatory response to sustained hypoxia (CI) [Cartwright et al.], 612

formulation-dependent brain and lung distribution kinetics of propofol in rats (LI) [Dutta and Ebbling], 678

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LI) [Beaufort et al.], 707

pharmacodynamic interaction between propofol and fentanyl with respect to the suppression of somatic or hemodynamic responses to skin incision, peritoneum incision, and abdominal wall retraction (CI) [Kazama et al.], 894

population pharmacodynamics and pharmacokinetics of remifentanil as a supplement to nitrous oxide anesthesia for elective abdominal surgery (CI) [Drover and Lemmens], 869

population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

remifentanil pharmacokinetics in obese *versus* lean patients (CI) [Egan et al.], 562

reversal of the sedative and sympatholytic effects of dexmedetomidine with a specific  $\alpha_2$ -adrenoceptor antagonist atipamezole: a pharmacodynamic and kinetic study in healthy volunteers (CI) [Scheiner et al.], 574

**Pharmacology**

- comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CI) [Naguib et al.], 1116
- high concentration cisatracurium ICU solution (CO) [Nishio et al.], 1605
- incompatibility of propofol emulsion with anesthetic drugs (CO) [Lamontagne et al.], 1609

**Phencyclidine**

- anesthetic agents and hypothermia in ischemic brain protection (EV) [Bhardwaj and Kirsch], 289
- differential effects of anesthetic agents on outcome from near-complete but not incomplete global ischemia in the rat (LI) [Miura et al.], 391
- effect of intravenous anesthetics on spontaneous and endotoxin-stimulated cytokine response in cultured human whole blood (LI) [Larsen et al.], 1218
- oral ketamine for the management of combative autistic adult (CO) [Bachenberg], 549

**Phenylephrine**

- impact of systemic vasoconstrictors on the cerebral circulation of anesthetized patients (CI) [Strebler et al.], 67
- is phenylephrine or sodium bisulfite neurotoxic? (CO) [Tanaka and Nishikawa], 272
- phenylephrine and inhaled nitric oxide (CO) [Troncy and Blaise], 538, [Doering et al.], 539
- transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Rowlingson], 275, [Sakura and Drasner], 274, [Lambert], 274

**Phrenic nerve block**

- idiopathic chronic hiccup (ICH): phrenic nerve block is not the way to go (CO) [Petroianu], 1284, [Okuda et al.], 1285

**Physician and patient safety**

- airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576

**Pituitary apoplexy**

- pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

**Plasma disappearance rate**

- blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322

**Platelets and platelet function**

- differential effect of halothane and forskolin on platelet cytosolic  $Ca^{2+}$  mobilization and aggregation (LI) [Corbin et al.], 401
- emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777
- intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567

**Pneumothorax**

- pneumothorax during endoscopic extraperitoneal herniorrhaphy (CO) [Toyoshima et al.], 1040
- tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250

**Politics and publishing**

- medical information on the Internet (SA) [Rampill], 1233

**Population modeling**

- population pharmacodynamics and pharmacokinetics of remifentanil as a supplement to nitrous oxide anesthesia for elective abdominal surgery (CI) [Drover and Lemmens], 869
- population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430
- population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

**Porphyria**

- prolonged loss of consciousness and elevated porphyrins following propofol administrations (CR) [Asirvatham et al.], 1029

**Positioning**

- additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CI) [Germann et al.], 1401
- displacement of double-lumen tubes after patient positioning (CO) [Cheng et al.], 1282, [Klein and Karzai], 1283
- effect of various lithotomy positions on lower-extremity blood pressure (CI) [Halliwill et al.], 1373
- pulmonary blood flow does not redistribute in dogs with reposition from supine to left lateral position (LI) [Mure et al.], 483

**Positive end-expiratory pressure**

- intermittent CPAP: a new mode of ventilation during general anesthesia (CI) [Bratzke et al.], 334
- renal nerves are not involved in sodium and water retention during mechanical ventilation in awake dogs (LI) [Boenke et al.], 942
- transmural pressure of epidural veins in the thoracic and lumbar spine of pigs (LI) [Nystrom et al.], 449

**Positron emission tomography (PET) scanning**

- quantitative EEG correlations with brain glucose metabolic rate during anesthesia in volunteers (CI) [Alkire], 323

**Postoperative care**

- $\beta$ -adrenergic blockade accelerates conversion of postoperative supraventricular tachyarrhythmias (CI) [Balser et al.], 1052
- antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CI) [Song et al.], 838
- atelectasis and gas exchange after cardiac surgery (CI) [Tenling et al.], 371
- effects of atenolol on postoperative myocardial ischemia (CO) [Lustik et al.], 794
- effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CI) [Alfonsi et al.], 43
- epidural bupivacaine-morphine analgesia *versus* patient-controlled analgesia following abdominal aortic surgery: analgesic, respiratory, and myocardial effects (CI) [Boylan et al.], 585
- fatal pulmonary fat embolism in early postoperative period (CR) [Heine et al.], 1589
- implementation of pharmaceutical practice guidelines—once again (CO) [Viby-Mogensen], 268
- multi-center study of intrathecal neostigmine for analgesia following vaginal hysterectomy (CI) [Lauretti et al.], 913
- obstetric postanesthesia care unit stays: reevaluation of discharge criteria after regional anesthesia (EA) [Cohen et al.], 1557

## SUBJECT INDEX TO VOLUME 89

## Postoperative care—Pulmonary blood flow

pharmaceutical practice guidelines: do they actually *cost* money? (CO) [Fisher and Kelley], 269, [Lubarsky], 270

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LI) [Ebert et al.], 1524

sedative and analgesic sparing effect of music (CI) [Koch et al.], 300

successful perioperative management of a patient with Parkinson's disease by enteral levodopa administration under propofol anesthesia (CR) [Furuya et al.], 261

**Postoperative complications**

intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567

pituitary apoplexy following mitral valve repair (CR) [Meek et al.], 1580

postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

**Postoperative pain**

transnasal butorphanol is effective for postoperative pain relief in children undergoing myringotomy (CI) [Bennie et al.], 385

**Potassium and potassium channels**

isoflurane and sevoflurane induce vasodilation of cerebral vessels *via* ATP-sensitive  $K^+$  channel activation (LI) [Iida et al.], 954

isoflurane-induced dilation of porcine coronary arterioles is mediated by ATP-sensitive potassium channels (LI) [Zhou et al.], 182

**Power spectral analysis**

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hettick et al.], 1166

**Practice guidelines**

implementation of pharmaceutical practice guidelines—once again (CO) [Viby-Mogensen], 268

pharmaceutical practice guidelines: do they actually *cost* money? (CO) [Fisher and Kelley], 269, [Lubarsky], 270

**Preconditioning**

no evidence of ischemic preconditioning during coronary revascularization (CO) [Lennon], 1601

perfuse or precondition? (CO) [Lennon], 1600

**Premedication and sedation**

oral etomidate (CO) [Lauretti], 1280, [Streisand], 1281

oral ketamine for the management of combative autistic adult (CO) [Bachenberg], 549

parental presence during induction of anesthesia *versus* sedative premedication: which intervention is more effective? (CI) [Kain et al.], 1147

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

sedative and analgesic sparing effect of music (CI) [Koch et al.], 300

**Preoperative assessment and care**

parental presence during induction of anesthesia *versus* sedative premedication: which intervention is more effective? (CI) [Kain et al.], 1147

**Propofol**

antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CI) [Song et al.], 838

effect of propofol on isolated human pregnant uterine muscle (CI) [Shin et al.], 105

formulation-dependent brain and lung distribution kinetics of propofol in rats (LI) [Dutta and Ebling], 678

incompatibility of propofol emulsion with anesthetic drugs (CO) [Lamontagne et al.], 1609

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

is lack of statistical power always evidence of lack of effect? (CO) [Tommasino], 798, [Warner and Dexter], 799

isobolgraphic analysis of the interactions between midazolam and propofol at  $GABA_A$  receptors in embryonic mouse neurons (LI) [McAdam et al.], 1444

nefiracetam prevents propofol-induced anterograde and retrograde amnesia in the rodent without compromising quality of anesthesia (LI) [O'Gorman et al.], 699

prolonged loss of consciousness and elevated porphyrins following propofol administrations (CR) [Asirvatham et al.], 1029

propofol-induced increase in vascular capacitance is due to inhibition of sympathetic vasoconstrictive activity (LI) [Hoka et al.], 1495

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LI) [Ebert et al.], 1524

sedative and analgesic sparing effect of music (CI) [Koch et al.], 300

successful perioperative management of a patient with Parkinson's disease by enteral levodopa administration under propofol anesthesia (CR) [Furuya et al.], 261

temperature of propofol does not reduce the incidence of injection pain (CO) [Ozturk et al.], 1041

**Prostaglandins**

aspirin synergistically potentiates isoflurane minimum alveolar concentration reduction produced by morphine in the rat (LI) [Gomez de Segura et al.], 1489

treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecral prostaglandin  $E_1$  during partial liquid ventilation (LI) [Nakazawa et al.], 686

**Protein kinases**

mechanisms of isoflurane-increased submaximum  $Ca^{2+}$ -activated force in rabbit skinned femoral arterial strips (LI) [Toda and Su], 731

**Psychology, memory, and awareness**

bispectral EEG index during nitric oxide administration (CI) [Rampil et al.], 671

effect of isoflurane on the auditory steady-state response and on consciousness in human volunteers (CI) [Plourde et al.], 844

intraoperative awareness in fast-track cardiac anesthesia (CI) [Dowd et al.], 1068

nefaracetam prevents propofol-induced anterograde and retrograde amnesia in the rodent without compromising quality of anesthesia (LI) [O'Gorman et al.], 699

repetitive post-training exposure to enflurane modifies spatial memory in mice (LI) [Komatsu et al.], 1184

unexpected arousal effect of etomidate in a patient on high-dose steroids (CR) [Ilbeigi et al.], 1587

**Pulmonary artery catheter/catheterization**

continuous cardiac output catheters: delay in *in vitro* response time after controlled flow changes (LR) [Aranda et al.], 1592

is your pulmonary artery catheter shedding? (CO) [Olhoeft], 544, [Moore], 544, [Erb and Ramsay], 543

**Pulmonary blood flow**

inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157

pulmonary blood flow does not redistribute in dogs with reposition from supine to left lateral position (LI) [Mure et al.], 483

#### Pulmonary edema

exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LI) [Verbrugge et al.], 467

#### Pulmonary hypertension

additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CR) [Germann et al.], 1401

improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586

treatment of pulmonary hypertension and hypoxia due to oleic acid induced lung injury with intrathecal prostaglandin E<sub>1</sub> during partial liquid ventilation (LI) [Nakazawa et al.], 686

#### Pulmonary system. *See Lung function and disease*

#### Pulmonary thromboembolism

acute bronchospasm associated with methylmethacrylate cement (CO) [Nimmagadda and Salem], 1290

combined use of transesophageal echocardiography and basket catheter can prevent tumor embolism in a patient with renal cell carcinoma (CR) [Tanaka et al.], 1015

fatal pulmonary fat embolism in early postoperative period (CR) [Heine et al.], 1589

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

treatment of pulmonary embolism during cesarean section with recombinant tissue plasminogen activator (CR) [Nishimura et al.], 1027

#### Pulse oximetry

circulating blood volume measured by pulse dye-densitometry: comparison with 131I-HSA analysis (CI) [Iijima et al.], 1329

pulse oximetry probe adhesive disks: a potential for infant aspiration (CO) [Reddy and Cook-Sather], 1603

upper extremity veno-arterial shunting during pediatric orthotopic liver transplantation (CR) [Henderson et al.], 1247

#### Pulse spectrophotometry

blood volume measurement at the bedside using ICG pulse spectrophotometry (CI) [Haruna et al.], 1322

circulating blood volume measured by pulse dye-densitometry: comparison with 131I-HSA analysis (CI) [Iijima et al.], 1329

## Q

#### Quality of life

Tamburini (ed.), *Quality of Life Assessment in Medicine. A CD-ROM for Windows, Issue 2* (EM) [Raja and Haythornthwaite], 1043

## R

#### Radiology. *See Imaging and radiology*

#### Radiosurgery

anesthesia for pediatric stereotactic radiosurgery (CR) [Bauman et al.], 255

#### Rapamycin

treatment of normal skeletal muscle with FK506 or rapamycin re-

sults in halothane-induced muscle contracture (LI) [Brooks-bank et al.], 693

#### Receptors and signal transduction

acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CI) [Booth et al.], 602, [Booth et al.], 602 receptor-specific reversible sedation: beginning of new era of anesthesia? (EV) [Talke], 560

#### Red cell transfusion

Reid and Nance (eds.), *Red Cell Transfusion: A Practical Guide* (EM) [Gregoretti], 1301

#### Regional anesthesia and anesthetics. *See also Local anesthesia and anesthetics*

anesthesia safety, outcomes, and prospective study design (CO) [Price and Carpenter], 790, [Auroy et al.], 791

bowing of the needle technique for nerve block (CO) [Kirkpatrick et al.], 1606

the centennial of spinal anesthesia (SA) [Wulf], 500

cryoanalgesia: a novel treatment for hip adductor spasticity and obturator neuralgia (CR) [Kim and Ferrante], 534

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

#### Illustrated Notes in Regional Anesthesia (WS) [Oyston], 1613

obstetric postanesthesia care unit stays: reevaluation of discharge criteria after regional anesthesia (EA) [Cohen et al.], 1557

Peutrell and Mather (eds.), *Regional Anesthesia for Babies and Children* (EM) [Lönnqvist], 551

prolonged intercostal nerve blockade in sheep using controlled release of bupivacaine and dexamethasone from polymer microspheres (LI) [Dräger et al.], 969

prospective, randomized comparison of deep or superficial cervical plexus block for carotid endarterectomy surgery (CI) [Stoneham et al.], 907

sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LI) [Kohane et al.], 1199

source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254

*Streptococcus salivarius* meningitis after spinal anesthesia (CR) [Laurila et al.], 1579

total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CI) [Freedman et al.], 633

transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Lambert], 274, [Sakura and Drasner], 274, [Rowlingson], 275

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

#### Remifentanil

cerebral blood flow and CO<sub>2</sub> reactivity is similar during remifentanil/N<sub>2</sub>O and fentanyl/N<sub>2</sub>O anesthesia (CI) [Ostapovich et al.], 358

does size matter? (EV) [Bouillon and Shafer], 557

population pharmacodynamics and pharmacokinetics of remifentanil as a supplement to nitrous oxide anesthesia for elective abdominal surgery (CI) [Drover and Lemmens], 869

## SUBJECT INDEX TO VOLUME 89

## Remifentanil—Sedation

remifentanil pharmacokinetics in obese *versus* lean patients (CD) [Egan et al.], 562

**Renal blood flow**  
effects of hyperventilation and hypocapnic/normocapnic hypoxemia on renal function and lithium clearance in humans (CD) [Olsen et al.], 1389

**Renal function and disease. See Kidney function and disease**

**Renin-angiotensin system**  
EXIT procedure facilitates delivery of an infant with a pretracheal teratoma (CR) [Shih et al.], 1573

**Reports of scientific meetings**  
20th Annual Spring Meeting and Workshops of the Society for Education in Anesthesia (SM) [Mets], 807

**Respiration. See Lung function and disease; Ventilatory control**

**Respiratory distress syndrome, acute. See Acute respiratory distress syndrome**

**Respiratory failure**  
additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CD) [Germann et al.], 1401  
improvement in extreme hypoxemia during end-stage congenital heart disease using nasal nitric oxide (CR) [Cholley et al.], 1586  
intravenous almitrine bimesylate reversibly induces lactic acidosis and hepatic dysfunction in patients with acute lung injury (CD) [B'chir et al.], 823

**Resuscitation. See Cardiopulmonary resuscitation; Shock and resuscitation**

**Review articles**  
anesthesia for major thermal injury (RA) [MacLennan et al.], 749  
primer for EEG signal processing in anesthesia (RA) [Rampil], 980

**Reviews of educational material. See also Web site reviews**  
Abrams and Grande (eds.), *Trauma Anesthesia and Critical Care of Neurological Injury* (EM) [Pittet], 1301  
Benumof (ed.), *Anesthesia and Uncommon Diseases* (EM) [Baele], 809  
Cottrell and Hartung (eds.), *Journal of Neurosurgical Anesthesiology* (EM) [Sperry], 278  
Diamond and Coniam (eds.), *The Management of Chronic Pain, Second Edition* (EM) [Crews], 809  
DiNardo (ed.), *Anesthesia for Cardiac Surgery, 2nd edition* (EM) [Nielsen], 1302  
Faria (ed.), *Medical Warrior: Fighting Corporate Socialized Medicine* (EM) [Speight], 1043  
Irving and Wallace (eds.), *Pain Management for the Practicing Physician* (EM) [Warfield], 1043  
Mueller and Lundberg, *Manual of Drug Interactions for Anesthesiology* (EM) [Sarathy and Cullen], 810  
Orient and Wright (eds.), *Sutton's Law* (EM) [Bogard], 551  
Peutrell and Mather (eds.), *Regional Anesthesia for Babies and Children* (EM) [Lönnqvist], 551  
Reid and Nance (eds.), *Red Cell Transfusion: A Practical Guide* (EM) [Gregoret], 1301  
Rom, *Fatal Extraction* (EM) [Berry], 278  
Sasada and Smith, *Drugs in Anesthesia and Intensive Care, Second Edition* [Mark], 279  
Tamburini (ed.), *Quality of Life Assessment in Medicine. A CD-ROM for Windows, Issue 2* (EM) [Raja and Haythornthwaite], 1043

20th Annual Spring Meeting and Workshops of the Society for Education in Anesthesia (SM) [Mets], 807  
Unknown, *Atlas of Anesthesia, Volumes 1, 2, & 3* (EM) [Hoenemann and Sullivan], 1610  
Unknown, *Cardiopulmonary Critical Care, 3rd Edition* (EM) [MacGregor], 1610  
Unknown, *The Management of Pain* (EM) [Lauretti], 1610  
Wall and Melzack (eds.), *Textbook of Pain on CD-ROM* (EM) [Schell], 552

**Rewarming**  
hypercapnia prevents jugular bulb desaturation during rewarming from hypothermic cardiopulmonary bypass (CD) [Hänel et al.], 19

jugular venous hemoglobin desaturation during rewarming on cardiopulmonary bypass: what does it mean, what does it matter? (EV) [Hindman], 3

**Right ventricular ejection fraction**  
additive effect of nitric oxide inhalation on the oxygenation benefit of the prone position in the adult respiratory distress syndrome (CD) [Germann et al.], 1401

**Rocuronium**  
comparative clinical pharmacology of rocuronium, cisatracurium, and their combination (CD) [Naguib et al.], 1116

**Ropivacaine**  
sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LD) [Kohane et al.], 1199

**Rural anesthesia**  
distribution of anesthesia personnel in rural areas (CO) [Aldrete], 1597

**S**

***Saccharomyces cerevisiae***  
volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LD) [Wolfe et al.], 174

**Safety. See Physician and patient safety**

**Salbutamol**  
combined intravenous lidocaine and inhaled salbutamol protect against bronchial hyperreactivity more effectively than lidocaine or salbutamol alone (CI) [Groeben et al.], 862

**Sciatic nerve block**  
sciatic nerve blockade in infant, adolescent, and adult rats: a comparison of ropivacaine and bupivacaine (LD) [Kohane et al.], 1199

**Scientific meetings. See Reports of scientific meetings**

**Sedation. See also Premedication and sedation**  
anesthesia for pediatric stereotactic radiosurgery (CR) [Bauman et al.], 255  
population pharmacodynamics of midazolam administered by target controlled infusion in SICU patients after CABG surgery (CI) [Somma et al.], 1430  
population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418  
receptor-specific reversible sedation: beginning of new era of anesthesia? (EV) [Talke], 560

**Sensory testing**

AMPA/kainate antagonist LY293558 reduces capsaicin-evoked hyperalgesia but not pain in normal skin in humans (CD) [Sang et al.], 1060

**Sepsis and septic shock**

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CD) [Papazian et al.], 1089

systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CD) [Tavernier et al.], 1313

**Sevoflurane**

antiemetic activity of propofol after sevoflurane and desflurane anesthesia for outpatient laparoscopic cholecystectomy (CD) [Song et al.], 838

comparison of the respiratory effects of sevoflurane and halothane in infants and young children (CD) [Brown et al.], 86

effects of sevoflurane and isoflurane on renal function and on possible markers of nephrotoxicity (CD) [Higuchi et al.], 307

effects of sevoflurane on QT interval in a patient with congenital long QT syndrome (CR) [Gallagher et al.], 1569

fate and toxicity of 2-(fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propane (compound A)-derived mercaptopyrurates in male Fischer 344 rats (LD) [Uttam Singh et al.], 1174

isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CD) [Segawa et al.], 1407

isoflurane and sevoflurane induce vasodilation of cerebral vessels via ATP-sensitive  $K^+$  channel activation (LD) [Iida et al.], 954

lack of correlation between the reduction of sevoflurane MAC and the cerebellar cyclic GMP concentrations in mice treated with 7-nitroindazole (LD) [Ichinose et al.], 143

local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane *versus* isoflurane anesthesia in rats (LD) [Lenz et al.], 1480

recovery from sevoflurane anesthesia: a comparison to isoflurane and propofol anesthesia (LD) [Ebert et al.], 1524

single-breath vital capacity rapid inhalation induction in children: 8% sevoflurane *versus* 5% halothane (CD) [Agnor et al.], 379

use of inhaled sevoflurane for endotracheal intubation in epiglottitis (CR) [Spalding and Ala-Kokko], 1025

volatile anesthetics do not alter bradykinin-induced release of nitric oxide or  $\text{L}\text{-citrulline}$  in crystalloid perfused guinea pig hearts (LD) [Fujita et al.], 421

**Shivering**

effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CD) [Alfonsi et al.], 43

non-thermoregulatory shivering in patients recovering from isoflurane or desflurane anesthesia (CD) [Horn et al.], 878

**Shock and resuscitation**

does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CD) [Papazian et al.], 1089

systolic pressure variation as a guide to fluid therapy in patients with sepsis-induced hypotension (CD) [Tavernier et al.], 1313

**Simulation**

assessment of clinical performance during simulated crises using both technical and behavioral ratings (CD) [Gaba et al.], 8

clinical simulation: technical novelty or innovation in education (EV) [Murray], 1

**Skeletal muscle function and disease**

mechanisms of isoflurane-increased submaximum  $\text{Ca}^{2+}$ -activated force in rabbit skinned femoral arterial strips (LD) [Toda and Sui], 731

treatment of normal skeletal muscle with FK506 or rapamycin results in halothane-induced muscle contracture (LD) [Brooks-bank et al.], 693

**Skin vasomotor reflex**

skin vasomotor reflex as a measure of depth of anesthesia (CO) [Ezri et al.], 1281, [Shimoda], 1282

**Smooth muscle**

effect of propofol on isolated human pregnant uterine muscle (CD) [Shin et al.], 105

effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LD) [Tanaka and Tsuchida], 1209

halothane attenuates calcium sensitization in airway smooth muscle by inhibiting G-proteins (LD) [Kai et al.], 1543

mechanisms of isoflurane-increased submaximum  $\text{Ca}^{2+}$ -activated force in rabbit skinned femoral arterial strips (LD) [Toda and Sui], 731

role of intracellular  $\text{Ca}^{2+}$  stores in the inhibitory effect of halothane on airway smooth muscle contraction (LD) [Yamakage et al.], 165

**Sodium bisulfite**

is phenylephrine or sodium bisulfite neurotoxic? (CO) [Tanaka and Nishikawa], 272

**Sodium excretion**

effects of hyperventilation and hypocapnic/normocapnic hypoxemia on renal function and lithium clearance in humans (CD) [Olsen et al.], 1389

**Special articles**

cardiac massage: a method rescued from oblivion (SA) [Juvin and J-M Desmonts], 771

the centennial of spinal anesthesia (SA) [Wulf], 500

effect of group discussion on interrater reliability of structured peer review (SA) [Levine et al.], 507

Gary Strichartz: life among local anesthetics (SA) [Gelman], 820

the Internet: a practical guide for anesthesiologists (SA) [Ruskin], 1003

legacy of Atropos, the Fate who cut the thread of life (SA) [Holzman], 241

medical information on the Internet (SA) [Rampil], 1233

**Spinal anesthesia and analgesia**

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

the centennial of spinal anesthesia (SA) [Wulf], 500

cerebrospinal fluid pharmacokinetics and pharmacodynamics of intrathecal neostigmine methylsulfate in humans (CD) [Shafer et al.], 1074

effect of adding a minidose of clonidine to intrathecal sufentanil for labor analgesia (CD) [Mercier et al.], 594

effects of intrathecal NMDA and non-NMDA antagonists on acute thermal nociception and their interaction with morphine (LD) [Nishiyama et al.], 715

interaction of intrathecally infused morphine and lidocaine in rats (part I: synergistic antinociceptive effects (LD) [Saito et al.], 1455

## SUBJECT INDEX TO VOLUME 89

## Spinal anesthesia and analgesia—Suxamethonium

interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

**Spinal cord function and disease**

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

epigastric antinociception by cervical dorsal column lesions in rats (LI) [Feng et al.], 411

transmural pressure of epidural veins in the thoracic and lumbar spine of pigs (LI) [Nystrom et al.], 449

**Spinal meninges**

barrier properties of the spinal meninges are markedly decreased by freezing meningeal tissues (LR) [Thompson and Bernards], 1276

**Splanchnic circulation**

effects of intraabdominally insufflated carbon dioxide and elevated intraabdominal pressure on splanchnic circulation: an experimental study in pigs (LI) [Blobner et al.], 475

*Staphylococcus aureus*

source of epidural infection following epidural analgesia identified by pulsed-field gel electrophoresis (CR) [Sakuragi et al.], 1254

**Statistics**

is lack of statistical power always evidence of lack of effect? (CO) [Warner and Dexter], 799, [Tommasino], 798

method to assist in the scheduling of add-on surgical cases—upper prediction bounds for surgical case durations based on the log-normal distribution (EA) [Zhou and Dexter], 1228

**Stereotactic radiosurgery**

anesthesia for pediatric stereotactic radiosurgery (CR) [Bauman et al.], 255

**Steroids and steroid therapy**

prolonged intercostal nerve blockade in sheep using controlled release of bupivacaine and dexamethasone from polymer microspheres (LI) [Dräger et al.], 969

unexpected arousal effect of etomidate in a patient on high-dose steroids (CR) [Ilbeigi et al.], 1587

**Stress response**

isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CI) [Segawa et al.], 1407

persistent alterations of the autonomic nervous system after noncardiac surgery (CI) [Amar et al.], 30

**Strichartz, Gary**

Gary Strichartz: life among local anesthetics (SA) [Gelman], 820

**Stroke**

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

**Subarachnoid fluid**

total spinal anesthesia following epidural saline injection after prolonged epidural anesthesia (CR) [Park et al.], 1267

**Substance abuse**

illicit substance abuse via an implanted intrathecal pump (CR) [Burton et al.], 1264

**Succinylcholine**

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LI) [Beaufort et al.], 707

**Sufentanil**

concentration-response relationships for fentanyl and sufentanil in patients undergoing coronary artery bypass grafting (CI) [Thomson et al.], 852

dose-dependent reduction of the minimum local analgesic concentration of bupivacaine by sufentanil for epidural analgesia in labor (CI) [Polley et al.], 626

effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CI) [Alfonsi et al.], 43

intrathecal sufentanil dose response in nulliparous patients (CI) [Arkoosh et al.], 364

intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CI) [Riley et al.], 73

small doses of sufentanil will produce violent coughing in young children (CO) [Yemen], 271, [Bennett et al.], 272

value of presenting the time-course of pain relief in analgesic trials (CO) [Goudas and Carr], 1602

**Sumatriptan**

sumatriptan was effective in electroconvulsive therapy (ECT) headache (CO) [Oms et al.], 1291

**Surfactant**

exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LI) [Verbrugge et al.], 467

**Surgery. See also Cardiac surgery**

beta-blockade in non-cardiac surgical patients (CO) [Leung], 795, [Wallace], 796, [Wahlster], 797

the blood sparing effect of aprotinin should be revisited (CO) [Lentschener and Benhamou], 1598

a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273

effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133

intraoperative modulation of alveolar macrophage function during isoflurane and propofol anesthesia (CI) [Kotani et al.], 1125

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

metallic mercury leak from the esophageal bougy and postoperative chest pain (CO) [Taylor and Kamaya], 548

method to assist in the scheduling of add-on surgical cases—upper prediction bounds for surgical case durations based on the log-normal distribution (EA) [Zhou and Dexter], 1228

parental presence during induction of anesthesia versus sedative premedication: which intervention is more effective? (CI) [Kain et al.], 1147

persistent alterations of the autonomic nervous system after noncardiac surgery (CI) [Amar et al.], 30

transfusion-related acute lung injury (TRALI) complicating colectomy for ulcerative colitis (CR) [Keifer et al.], 1020

**Surgical intensive care unit**

population pharmacokinetics of midazolam administered by target controlled infusion for sedation following coronary artery bypass grafting (CI) [Zomorodi et al.], 1418

**Suxamethonium**

inhibition of the enzymic degradation of suxamethonium and mivacurium increases the onset time of submaximal neuromuscular block (LI) [Beaufort et al.], 707

**Sympathetic nervous system**

- effects of hyperventilation and hypocapnic/normocapnic hypoxemia on renal function and lithium clearance in humans (CI) [Olsen et al.], 1389
- heart rate variability during chemical thoracic sympathectomy (CI) [Hirose et al.], 666
- hypoxic apnea, epidural anesthesia, and infants (CO) [Hogan], 1286, [Gunter], 1285
- intrathecal neostigmine, but not sympathectomy, relieves mechanical allodynia in a rat model of neuropathic pain (LI) [Lavand'homme et al.], 493
- intrathecal sufentanil produces sensory changes without hypotension in male volunteers (CI) [Riley et al.], 73
- intravenous regional clonidine in the management of sympathetically maintained pain (CR) [Reuben et al.], 527
- isoflurane and sevoflurane augment norepinephrine responses to surgical noxious stimulation in humans (CI) [Segawa et al.], 1407
- myocardial effects of desflurane in hamsters with hypertrophic cardiomyopathy (LI) [Vivien et al.], 1191
- propofol-induced increase in vascular capacitance is due to inhibition of sympathetic vasoconstrictive activity (LI) [Hoka et al.], 1495
- renal nerves are not involved in sodium and water retention during mechanical ventilation in awake dogs (LI) [Boemke et al.], 942
- skin vasomotor reflex as a measure of depth of anesthesia (CO) [Ezri et al.], 1281, [Shimoda], 1282

**Synaptosomes**

- effects of intravenous general anesthetics on [<sup>3</sup>H]GABA release from rat cortical synaptosomes (LI) [Murugaiah and Hemmings], 919

**T****Temperature regulation and management**

- differential immediate-early gene expression in ovine brain after cardiopulmonary bypass and hypothermic circulatory arrest (LI) [Bokesch et al.], 961
- effects of meperidine and sufentanil on the shivering threshold of postoperative patients (CI) [Alfonsi et al.], 43
- effects of mild perioperative hypothermia on cellular immune responses (CI) [Beilin et al.], 1133
- experimental determination of heat flow parameters during induction of general anesthesia (CI) [Sessler and Sessler], 657
- non-thermoregulatory shivering in patients recovering from isoflurane or desflurane anesthesia (CI) [Horn et al.], 878
- paralysis only slightly reduces the febrile response to interleukin-2 during isoflurane anesthesia (CI) [Lanhardt et al.], 648
- proposal for new temperature monitoring and thermal management guidelines (CO) [Sessler], 1298
- temperature correction of the calculated alveolar oxygen tension (CO) [Habibzadeh and Yadollahie], 1042

**Tenoxicam**

- local addition of tenoxicam reduces the incidence of low back pain after lumbar epidural anesthesia (CI) [Wang et al.], 1414

**Tension pneumothorax**

- tension pneumothorax during apnea testing for the determination of brain death (CR) [Bar-Joseph et al.], 1250

**Teratogenicity**

- assessment of teratogenic effects of lidocaine in rat embryos (LI) [Fujinaga], 1553

**Tetracaine**

- transient neurologic symptoms after spinal anesthesia: an epidemiologic study of 1,863 patients (CI) [Freedman et al.], 633
- transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—an alternative (CO) [Rowlingson], 275, [Lambert], 274, [Sakura and Drasner], 274

**Tetrodotoxin**

- re-examination of tetrodotoxin for prolonged duration local anesthesia (LI) [Kohane et al.], 119

**Thiopental**

- thiopental alters contraction, intracellular  $\text{Ca}^{2+}$  and  $\text{pH}$  in rat ventricular myocytes (LI) [Kanaya et al.], 202
- thiopental inhibits increases in  $[\text{Ca}^{2+}]_i$  induced by membrane depolarization, NMDA receptor activation, and ischemia in rat hippocampal and cortical slices (LI) [Zhan et al.], 456

**Thoracic anesthesia**

- foreign body in the trachea originated from the inner wall of the tracheal tube (CO) [Harioka et al.], 1596
- new double intrabronchial tube (Naruke tube) for tracheostomized patients (CO) [Saito et al.], 1038

**Thrombocytopenia**

- emergent cardiopulmonary bypass in five patients with heparin-induced thrombocytopenia type II employing recombinant hirudin (CR) [Koster et al.], 777
- intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567

**Thromboembolism**

- a devastating complication of inadvertent carotid artery puncture (CR) [Heath et al.], 1273
- intraoperative heparin flushes and subsequent acute heparin-induced thrombocytopenia (CR) [Ling and Warkentin], 1567
- left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

**Tolerance**

- interaction of intrathecally infused morphine and lidocaine in rats (part II): effects on the development of tolerance to morphine (LI) [Saito et al.], 1464

**Tourniquet test**

- intrathecal adenosine administration (CI) [Rane et al.], 1108

**Toxicity, neurologic. See Neurologic toxicity****Tracheostomy**

- airway fire during tracheostomy: extubation may be contraindicated (CR) [Chee and Benumof], 1576

**Tracheotomy**

- laryngeal mask airway fitted over a tracheotomy orifice: a mean to ventilate a tracheotomized patient during induction of anesthesia (CO) [Morita and Takenoshita], 1295

**Transesophageal echocardiography**

- combined use of transesophageal echocardiography and basket catheter can prevent tumor embolism in a patient with renal cell carcinoma (CR) [Tanaka et al.], 1015

- comparison of left ventricular performance indices measured by transesophageal echocardiography with automated border detection (CI) [Declerk et al.], 341

- intraoperative determination of cardiac output using multiplane

## SUBJECT INDEX TO VOLUME 89

## Transesophageal echocardiography—Vomiting

transesophageal echocardiography: a comparison to thermodilution (CI) [Perrino et al.], 350

left ventricular thrombi: intraoperative detection by transesophageal echocardiography and recognition of a source of post CABG embolic stroke: a case series (CR) [Maslow et al.], 1257

**Transmucosal drug delivery**

- oral etomidate (CO) [Lauretti], 1280, [Streisand], 1281
- transnasal butorphanol is effective for postoperative pain relief in children undergoing myringotomy (CI) [Bennie et al.], 385

**Transplantation**

- halothane-associated hepatitis in a 6-year-old boy: evidence for native liver regeneration following failed treatment with auxiliary liver transplantation (CR) [Munro et al.], 524
- post-transplant lymphoproliferative disease may present with severe airway obstruction (CR) [Hammer et al.], 263
- upper extremity veno-arterial shunting during pediatric orthotopic liver transplantation (CR) [Henderson et al.], 1247

**Trauma. See also Emergency anesthesia**

- Abrams and Grande (eds.), *Trauma Anesthesia and Critical Care of Neurological Injury* (EM) [Pittet], 1301
- ITACCS (International Trauma Anesthesia and Critical Care Society) (WS) [McCunn], 554

**V**

**Vascular physiology and pharmacology**

- acute depression of myocardial  $\beta$ -adrenergic receptor signaling during cardiopulmonary bypass: impairment of the adenylyl cyclase moiety (CI) [Booth et al.], 602
- effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209
- flow-induced dilation of rat coronary microvessels is attenuated by isoflurane but enhanced by halothane (LI) [Park et al.], 132
- isoflurane-induced dilation of porcine coronary arterioles is mediated by ATP-sensitive potassium channels (LI) [Zhou et al.], 182
- mechanisms of isoflurane-increased submaximum  $Ca^{2+}$ -activated force in rabbit skinned femoral arterial strips (LI) [Toda and Su], 731
- propofol-induced increase in vascular capacitance is due to inhibition of sympathetic vasoconstrictive activity (LI) [Hoka et al.], 1495
- transmural pressure of epidural veins in the thoracic and lumbar spine of pigs (LI) [Nystrom et al.], 449
- volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

**Vascular smooth muscle**

- effects of halothane and isoflurane on  $\beta$ -adrenoceptor-mediated responses in the vascular smooth muscle of rat aorta (LI) [Tanaka and Tsuchida], 1209
- mechanisms of isoflurane-increased submaximum  $Ca^{2+}$ -activated force in rabbit skinned femoral arterial strips (LI) [Toda and Su], 731

**Vasoconstriction**

- does norepinephrine modify the effects of inhaled nitric oxide in septic patients with acute respiratory distress syndrome? (CI) [Papazian et al.], 1089

impact of systemic vasoconstrictors on the cerebral circulation of anesthetized patients (CI) [Strebel et al.], 67

**Ventilation**

- effects of hyperventilation and hypocapnic/normocapnic hypoxemia on renal function and lithium clearance in humans (CI) [Olsen et al.], 1389
- exogenous surfactant preserves lung function and reduces alveolar Evans Blue dye influx in a rat model of ventilation-induced lung injury (LI) [Verbrugge et al.], 467
- inhaled nitric oxide, almitrine infusion, or their coadministration as a treatment of severe hypoxic focal lung lesions (CI) [Payen et al.], 1157
- laryngeal mask airway fitted over a tracheotomy orifice: a mean to ventilate a tracheotomized patient during induction of anesthesia (CO) [Morita and Takenoshita], 1295
- mechanical. *See Mechanical ventilation*
- partial liquid. *See Partial liquid ventilation*
- prospective evaluation of clinical tests for placement of laryngeal mask airways (CI) [Joshi et al.], 1141

**Ventilatory control**

- carotid body chemoreceptor function is impaired by vecuronium during hypoxia (LI) [Wyon et al.], 1471
- comparison of the respiratory effects of sevoflurane and halothane in infants and young children (CI) [Brown et al.], 86
- effect of epidural fentanyl on neonatal respiration (CI) [Porter et al.], 79

**Ventricular fibrillation**

- spontaneous recovery after discontinuation of intraoperative cardio-pulmonary resuscitation: case report (CR) [Fröhlich], 1252

**Ventricular rate**

- emergency informed consent (EV) [Pearson], 1047

**Volatile anesthetics**

- common genetic determinants of halothane and isoflurane potencies in *Caenorhabditis elegans* (LI) [van Swinderen et al.], 1509
- effects of volatile anesthetics on atrial and AV nodal electrophysiological properties in guinea pig isolated perfused heart (LI) [Pekka Raatikainen et al.], 434
- isoflurane-induced dilation of porcine coronary arterioles is mediated by ATP-sensitive potassium channels (LI) [Zhou et al.], 182
- lack of correlation between the reduction of sevoflurane MAC and the cerebellar cyclic GMP concentrations in mice treated with 7-nitroindazole (LI) [Ichinose et al.], 143
- local cerebral blood flow, local cerebral glucose utilization and flow-metabolism coupling during sevoflurane *versus* isoflurane anesthesia in rats (LI) [Lenz et al.], 1480
- mechanistic aspects of carbon monoxide formation from volatile anesthetics (LI) [Baxter et al.], 929
- partition coefficients of volatile anesthetics in aqueous electrolyte solutions at various temperatures (LR) [Hönemann et al.], 1032
- volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LI) [Wolfe et al.], 174
- volatile anesthetics do not alter bradykinin-induced release of nitric oxide or L-citrulline in crystalloid perfused guinea pig hearts (LI) [Fujita et al.], 421

**Vomiting. *See Nausea, vomiting, and antiemetics***

## W

**Warfarin**

postoperative acetaminophen and warfarin: undesirable combination (CO) [Elias], 1296

**Web site reviews. See also Internet; Reviews of educational material**

*Illustrated Notes in Regional Anesthesia* (WS) [Oyston], 1613

*ITACCS (International Trauma Anesthesia and Critical Care Society)* (WS) [McCunn], 554

*Online Mendelian Inheritance in Man* (WS) [Oyston], 811

*World Anesthesia Online* (WS) [Oyston], 280

**Worldwide Congress on Pain (WS) [Cusick], 1304****Windkessel**

cardiovascular effects of xenon in isoflurane-anesthetized dogs with dilated cardiomyopathy (LI) [Hetrick et al.], 1166

## Y

**Yeast**

volatile anesthetic additivity and specificity in *Saccharomyces cerevisiae*: implications for yeast as a model system to study mechanisms of anesthetic action (LI) [Wolfe et al.], 174

## AUTHOR INDEX TO VOLUME 89

## A

Aantaa, Riku, *see Scheinin, Harry*  
 Abboud, Worood, *see Zhou, Xiping*  
 Abrams, Jonathan, *see Bennett, Joel A.*  
 Abramson, David C., Giannotti, Andrew G.: Perforation of the Right Ventricle with a Coronary Sinus Catheter during Preparation for Minimally Invasive Cardiac Surgery, 519  
 Abt, Arthur B., *see Keifer, John C.*  
 Adachi, Takehiko, *see Segawa, Hajime*  
 Agnor, Ross C., Sikich, Nancy, Lerman, Jerry: Single-breath Vital Capacity Rapid Inhalation Induction in Children: 8% Sevoflurane versus 5% Halothane, 379  
 Alahuhta, Seppo, *see Laurila, Jouko J.*  
 Ala-Kokko, Tero I., *see Spalding, Michael B.*  
 Albert, David B., *see Rosenberg, Andrew D.*  
 Albertucci, Mario, *see Aronson, Solomon*  
 Al-Chaer, Elie D., *see Feng, Yi*  
 Aldrete, J. Antonio, Aldrete, Valentyna T.: Rural Realities, 1597  
 Aldrete, Valentyna T., *see Aldrete, J. Antonio*  
 Alfonsi, Pascal, Sessler, Daniel I., Du Mano, Bertrand, Levron, Jean-Claude, Le Moing, Jean-Pierre, Chauvin, Marcel: The Effects of Meperidine and Sufentanil on the Shivering Threshold in Postoperative Patients, 43  
 Alkire, Michael T.: Quantitative EEG Correlations with Brain Glucose Metabolic Rate during Anesthesia in Volunteers, 323  
 Allen, Gregory: Predicting Malignant Hyperthermia Susceptibility, 797  
 Al-Zahrani, Salem, *see Naguib, Mohamed*  
 Amaha, Keisuke, *see Nakazawa, Koichi*  
 Amantea, Bruno, *see Chello, Massimo*  
 Amar, David, Fleisher, Martin, Pantuck, Carol B., Shamoon, Harry, Zhang, Hao, Roistacher, Nancy, Leung, Denis H. Y., Ginsburg, Ilana, Smiley, Richard M.: Persistent Alterations of the Autonomic Nervous System after Noncardiac Surgery, 30  
 Amar, David, *see Cohen, Shaul*  
 Amaya, Fumimasa, *see Hirose, Munetaka*  
 Ammar, Adel, *see Naguib, Mohamed*  
 Anders, M. W., *see Uttam Singh, Vinita*  
 Anderson, Glen, *see Gallagher, John D.*  
 Andoh, Tomio, *see Furuya, Ryousuke*  
 Anttila, Markku, *see Scheinin, Harry*  
 Aoyagi, Taku, *see Haruna, Masaki*  
 Aoyama, Kazuyoshi, *see Nakura, Nariaki*  
 Arai, Toshiyuki, *see Segawa, Hajime*  
 Aranda, Margaret, Mihm, Frederick G., Garrett, Sheryl, Mihm, Megan N., Pearl, Ronald G.: Continuous Cardiac Output Catheters: Delay in *In Vitro* Response Time after Controlled Flow Changes, 1592  
 Arkoosh, Valerie A., Cooper, Matthew, Nor-

ris, Mark C., Boxer, Louis, Ferouz, Fazeela, Silverman, Neil S., Huffnagle, H. Jane, Huffnagle, Suzanne, Leighton, Barbara L.: Intrathecal Sufentanil Dose Response in Nulliparous Patients, 364  
 Arnold, William P., III, *see Greene, Elliott S.*  
 Aronson, Solomon, Jacobsohn, Eric, Savage, Robert, Albertucci, Mario: The Influence of Collateral Flow on the Antegrade and Retrograde Distribution of Cardioplegia in Patients with an Occluded Right Coronary Artery, 1099  
 Asai, Takashi, *see Okuda, Yasuhisa*  
 Ash, George E., Jr., *see Meek, Eric N.*  
 Asirvatham, Sam J., Johnson, Tom W., Oberoi, Mohinder P., Jackman, Warren M.: Prolonged Loss of Consciousness and Elevated Porphyrins following Propofol Administrations, 1029  
 Atwell, Darryl M., *see Booth, John V.*  
 Auffray, Jean-Pierre, *see Papazian, Laurent*  
 Aun, Cindy, *see Brown, Karen*  
 Auroy, Yves, Narchi, Patrick, Messiah, Antoine, Samii, Kamran, Litt, Lawrence, Rouvier, Bernard: In Reply, 791  
 Ayoub, Chakib, *see Koch, Marc E.*

## B

Babacan, Avni, *see Ozturk, Ertan*  
 Babenco, H. Daniel, Blouin, Robert T., Conard, Pattilyn F., Gross, Jeffrey B.: Diphenhydramine Increases Ventilatory Drive during Alfentanil Infusion, 642  
 Bachenberg, Kenneth L.: Oral Ketamine for the Management of Combative Autistic Adult, 549  
 Backman, Steven B., *see Plourde, Gilles*  
 Bacon, Douglas R.: Henry K. Beecher, M.D.: An Historical Perspective?, 792  
 Badenhorst, Margaret E., *see Brooksbank, Richard L.*  
 Badier, Monique, *see Papazian, Laurent*  
 Badner, Neal H., Gelb, Adrian W.: In Reply, 1287  
 Baele, Ph.: *Anesthesia and Uncommon Diseases*. Edited by J. L. Benumof, 809  
 Baggs, Raymond B., *see Uttam Singh, Vinita*  
 Bailey, Melinda K., *see Greene, Elliott S.*  
 Baker, Kristy Z., *see Ostapkovich, Noelleen D.*  
 Balser, Jeffrey R., Martinez, Elizabeth A., Winters, Bradford D., Perdue, Philip W., Clarke, Ann Wray, Huang, Wenzheng, Tomaselli, Gordon F., Dorman, Todd, Campbell, Kurt, Lipsett, Pamela, Breslow, Michael J., Rosenfeld, Brian A.:  $\beta$ -Adrenergic Blockade Accelerates Conversion of Postoperative Supraventricular Tachyarrhythmias, 1052  
 Bancroft, M. Lee, *see Reynolds, Deborah S.*  
 Baraka, Anis, Salem, M. Ramez, Joseph, Ninos J.: The Origin of the "Algorithm", 277  
 Bardenheuer, Hubert J., *see Weigand, Markus A.*  
 Bar-Joseph, Gad, Bar-Lavie, Yaron, Zonis, Zeev: Tension Pneumothorax during Apnea Testing for the Determination of Brain Death, 1250  
 Barker, Steven J.: Blood Volume Measurement—The Next Intraoperative Monitor?, 1310  
 Bar-Lavie, Yaron, *see Bar-Joseph, Gad*  
 Barr, Julianne, *see Zomorodi, Katayoun*  
 Bart, Robert D., *see Miura, Yoshihide*  
 Bartz, Hans-Jürgen, *see Horn, Ernst-Peter*  
 Bauer, Michael, *see Larsen, Brita*  
 Bauman, Glenn S., Brett, Claire M., Cricillo, Samuel F., Larson, David A., Sneed, Penny, Stalpers, Lukas J. A., Edwards, Michael, Wara, William M.: Anesthesia for Pediatric Stereotactic Radiosurgery, 255  
 Baxter, Pamela J., Garton, Kyle, Kharasch, Evan D.: Mechanistic Aspects of Carbon Monoxide Formation from Volatile Anesthetics, 929  
 B'chir, Afef, Mebazaa, Alexandre, Losser, Marie-Reine, Romieu, Michel, Payen, Didier: Intravenous Almitrine Bismesylate Reversibly Induces Lactic Acidosis and Hepatic Dysfunction in Patients with Acute Lung Injury, 823  
 Beaufort, Tom M., Nigrovic, Vladimir, Proost, Johannes H., Houtwijk, Martin C., Wierda, J. Mark K. H.: Inhibition of the Enzymic Degradation of Suxamethonium and Mivacurium Increases the Onset Time of Submaximal Neuromuscular Block, 707  
 Beilin, Benzion, Shavit, Yehuda, Razumovsky, Jacob, Wolloch, Yaakov, Zeide, Alexander, Bessler, Hanna: Effects of Mild Perioperative Hypothermia on Cellular Immune Responses, 1133  
 Beloucif, Sadek, *see Payen, Didier*  
 Benhamou, Dan, *see Lentschener, Claude*  
 Benhamou, Dan, *see Mercier, Frédéric J.*  
 Bennett-Guerrero, Elliott, *see Booth, John V.*  
 Bennett, Joel A., Abrams, Jonathan, Van Riper, Daniel F., Horow, Jan C.: In Reply, 272  
 Bennie, Ruth E., Boehringer, Leigh A., Dierdorf, Stephen F., Hanna, Mark P., Means, Lyn J.: Transnasal Butorphanol Is Effective for Postoperative Pain Relief in Children Undergoing Myringotomy, 385  
 Benumof, Jonathan L., *see Chee, Won K.*  
 Benziger, David, *see Dräger, Christiane*  
 Berde, Charles B., *see Dräger, Christiane*  
 Berde, Charles B., *see Kohane, Daniel S.*

## AUTHOR INDEX TO VOLUME 89

Bernards, Christopher M., *see* Thompson, Susan J.

Bernstein, Ralph L., *see* Rosenberg, Andrew D.

Berry, Arnold J.: *Fatal Extraction*. By Mark Carl Rom, 278

Berry, Arnold J., *see* Greene, Elliott S.

Berry, Peter D., *see* Park, Paul C.

Bessler, Hanna, *see* Beilin, Benzion

Beste, Mechthild, *see* Groeben, Harald

Beyer, Juan Carlos, *see* Horn, Ernst-Peter

Bhardwaj, Anish, Kirsch, Jeffrey R.: Anesthetic Agents and Hypothermia in Ischemic Brain Protection, 289

Bissonnette, Bruno, *see* Strebel, Stephan P.

Blaise, Gilbert, *see* Corbin, François; *also see* Troncy, Eric

Blobner, Manfred, Bogdanski, Ralph, Kochs, Eberhard, Henke, Julia, Findeis, Alexander, Jelen-Esselborn, Sabine: Effects of Intraabdominally Insulated Carbon Dioxide and Elevated Intraabdominal Pressure on Splanchnic Circulation: An Experimental Study in Pigs, 475

Blomberg, Sture G., *see* Nystrom, Elisabet U. M.

Blouin, Robert T., *see* Babenco, H. Daniel

Boehringer, Leigh A., *see* Bennie, Ruth E.

Boemke, Willehad, Krebs, Martin O., Djalali, Kourosh, Bünger, Harald, Kaczmarek, Gabriele: Renal Nerves Are Not Involved in Sodium and Water Retention during Mechanical Ventilation in Awake Dogs, 942

Bogard, Terrence D.: *Sutton's Law*. Edited by Janet M. Orient, M.D., and Linda J. Wright, 551

Bogdanski, Ralph, *see* Blobner, Manfred

Böhm, Stephan H., *see* Verbrugge, Serge J. C.

Bokesch, Paula M., Seirafi, Peter A., Warner, Kenneth G., Marchand, James E., Kream, Richard M., Trapp, Bruce: Differential Immediate-early Gene Expression in Ovine Brain after Cardiopulmonary Bypass and Hypothermic Circulatory Arrest, 961

Boltz, Madalane Gail, *see* Hammer, Gregory B.

Bonello, Edric, *see* Porter, Jackie

Bonhomme, Vincent, *see* Plourde, Gilles

Booth, John V., Landolfo, Kevin P., Chesnut, Lynn C., Bennett-Guerrero, Elliott, Gerhardt, Mark A., Atwell, Darryl M., El-Moalem, Habib E., Smith, Mark Stafford, Funk, Bonita L., Kuhn, Cynthia M., Kwatra, Madan M., Schwinn, Debra A.: Acute Depression of Myocardial  $\beta$ -Adrenergic Receptor Signaling during Cardio-pulmonary Bypass: Impairment of the Adenyl Cyclase Moiety, 602

Borges, Michael F., Coulson, Alan S.: Perfusion or Precondition?, 1600

Bosnjak, Zeljko J., *see* Fujita, Satoshi; *also see* Hettrick, Douglas A.

Botney, Richard, *see* Gaba, David M.

Bouaziz, Hervé, *see* Mercier, Frédéric J.

Boulliou, Thomas, Shafer, Steven L.: Does Size Matter?, 557

Boxer, Louis, *see* Arkoosh, Valerie A.

Boyd, Gwendolyn L., *see* Shih, Grace H.

Boylan, John F., Katz, Joel, Kavanagh, Brian P., Klinck, John R., Cheng, Davy C. H., DeMajo, Wilfrid C., Walker, Paul M., Johnston, K. Wayne, Sandler, Alan N.: Epidural Bupivacaine-Morphine Analgesia versus Patient-controlled Analgesia following Abdominal Aortic Surgery: Analgesic, Respiratory, and Myocardial Effects, 585

Brandt, Paul C., *see* Franks, John J.

Bratzke, Edward, Downs, John B., Smith, Robert A.: Intermittent CPAP: A New Mode of Ventilation during General Anesthesia, 334

Bregeon, Fabienne, *see* Papazian, Laurent

Brennan, Timothy J.: AMPA/Kainate Receptor Antagonists as Novel Analgesic Agents, 1049

Breslow, Michael J., *see* Balser, Jeffrey R.

Brett, Claire M., *see* Bauman, Glenn S.

Brock-Utne, John G., *see* Diachun, Carol Ann B.

Brooksbank, Richard L., Badenhorst, Margaret E., Isaacs, Hyam, Savage, Nerina: Treatment of Normal Skeletal Muscle with FK506 or Rapamycin Results in Halothane-induced Muscle Contracture, 693

Brouillet, Denis, *see* Lamontagne, Christine

Brown, Karen, Aun, Cindy, Stocks, Janet, Jackson, Elizabeth, Mackersie, Angela, Hatch, David: A Comparison of the Respiratory Effects of Sevoflurane and Halothane in Infants and Young Children, 86

Brown, Morris, *see* Greene, Elliott S.

Brown, Robert H., Schauble, James F., Hamilton, Robert G.: Prevalence of Latex Allergy among Anesthesiologists: Identification of Sensitized but Asymptomatic Individuals, 292

Buchinger, Heiko, *see* Larsen, Brita

Buffington, Charles W., *see* Nystrom, Elisabet U. M.

Buhre, Wolfgang, *see* Kazmaier, Stephan

Bünger, Harald, *see* Boemke, Willehad

Burton, Allen W., Conroy, Brendan, Garcia, Eduardo, Solanki, Daneshvari, Williams, Courtney G. A.: Illicit Substance Abuse via an Implanted Intrathecal Pump, 1264

Burton, Allen W., Conroy, Brendan P., Sims, Stephen, Solanki, Daneshvari, Williams, Courtney G. A.: Complex Regional Pain Syndrome Type II as a Complication of Subclavian Catheter Insertion, 804

Butterworth, John, *see* Meek, Eric N.

Butterworth, John F., IV, *see* Prielipp, Richard C.

## C

Campbell, Kurt, *see* Balser, Jeffrey R.

Camuñas, Jorge, *see* Moskowitz, David M.

Cao, Sean, *see* Hammer, Gregory B.

Capan, Levon M., *see* O'Neill, Daniel

Capdevila, Xavier: In Reply, 1599

Caramico, Lisa A., *see* Kain, Zeev N.

Carlsson, Christer, *see* Saito, Toshiyuki

Carney, Edward, *see* Saito, Toshiyuki

Carpenter, Randall L., Hogan, Quinn H., Liu, Spencer S., Crane, Bert, Moore, James: Lumbar Sacral Cerebrospinal Fluid Volume Is the Primary Determinant of Sensory Block Extent and Duration during Spinal Anesthesia, 24

Carpenter, Randall L., *see* Price, Janet M.

Carr, Daniel B., *see* Goudas, Leonidas C.

Cartwright, Christopher R., Henson, Lindsey C., Ward, Denham S.: Effects of Alfentanil on the Ventilatory Response to Sustained Hypoxia, 612

Caruso, Rafael, *see* Sang, Christine N.

Ceranski, Jo Ann, *see* Diachun, Carol Ann B.

Chabal, Charles, *see* Jacobson, Louis

Chaney, Edmund F., *see* Jacobson, Louis

Chappell, Amy S., *see* Sang, Christine N.

Chartrand, Daniel, *see* Choinière, Manon

Chauvin, Marcel, *see* Alfonsi, Pascal

Chee, Won K., Benumof, Jonathan L.: Airway Fire during Tracheostomy: Extubation May Be Contraindicated, 1576

Chello, Massimo, Mastrotorto, Pasquale, Marchese, Antonietta R., Maltese, Giovanna, Santangelo, Ermengildo, Amantea, Bruno: Nitric Oxide Inhibits Neutrophil Adhesion during Experimental Extracorporeal Circulation, 443

Cheng, Davy C. H., *see* Boylan, John F.; *also see* Dowd, Noreen P.

Cheng, Ka Shun, Wu, Rick Sai Chuen, Tan, Peter P. C.: Displacement of Double-lumen Tubes after Patient Positioning, 1282

Chen, Shao-Rui, *see* Pan, Hui-Lin

Chesnut, Lynn C., *see* Booth, John V.

Chhibber, Ashwani K., *see* Lustik, Stewart J.

Choi, Chang-Shik, *see* Nishio, Masako

Choinière, Manon, Rittenhouse, Brian E.,

## AUTHOR INDEX TO VOLUME 89

Perreault, Sylvie, Chartrand, Daniel, Rousseau, Pierre, Smith, Bruce, Pepler, Carolyn: Efficacy and Costs of Patient-controlled Analgesia *versus* Regularly Administered Intramuscular Opioid Therapy, 1377

Cholley, Bernard P., Hilbert, Ulrich, Guinard, Nathalie, Mateo, Joaquim, Payen, Didier: Improvement of Extreme Hypoxemia during End-stage Congenital Heart Disease Using Nasal Nitric Oxide, 1586

Christensen, Henrik, *see* Olsen, Niels Vidiendal

Chung, Ham-See, *see* Wang, Yung-Liang

Chung, Wynda W., *see* Fujita, Satoshi

Ciricillo, Samuel F., *see* Bauman, Glenn S.

Cittanova, Marie-Laure, *see* Lenfant, François

Clarke, Ann Wray, *see* Balser, Jeffrey R.

Cohen, Shaul, Lowenwirt, Isaac, Pantuck, Carol B., Amar, David, Pantuck, Eugene J.: Bupivacaine, 0.01%, and/or Epinephrine, 0.5 µg/ml, Improve Epidural Fentanyl Analgesia after Cesarean Section, 1354

Cohen, Sheila E., Hamilton, Catherine L., Riley, Edward T., Walker, Dean S., Maccario, Alex, Halpern, Jerry W.: Obstetric Postanesthesia Care Unit Stays: Reevaluation of Discharge Criteria after Regional Anesthesia, 1559

Cohen, Sheila E., *see* Riley, Edward T.

Cohn, Aaron I., Lau, Mark, Leonard, Jason: Emergent Airway Management at a Remote Hospital Location in a Patient Wearing a Halo Traction Device, 545

Cohn, William, *see* Maslow, Andrew

Collea, Joseph V., *see* Shin, Young K.

Columb, Malachy O., *see* Polley, Linda S.

Combs, Arthur H.: In Reply, 1604

Comunale, Mark E., *see* Reynolds, Deborah S.

Conard, Pattily F., *see* Babenco, H. Daniel

Connelly, Neil Roy, Reuben, Scott S.: Peripherally Administered NSAIDs Provide for Patient Benefit, 276

Conner, Andrew, *see* Somma, Jacques

Connery, Cliff P., *see* Declerck, Christ

Conroy, Brendan P., *see* Burton, Allen W.

Cook, Richard I., *see* Faure, Eveline A. M.

Cook-Sather, Scott D., *see* Reddy, Shalini P.

Cooper, Matthew, *see* Arkoosh, Valerie A.

Corbin, François, Blaise, Gilbert, Sauvé, Rémy: Differential Effect of Halothane and Forskolin on Platelet Cytosolic  $Ca^{2+}$  Mobilization and Aggregation, 401

Coriat, Pierre, *see* Vivien, Benoit

Coulson, Alan S., *see* Borges, Michael F.

Crane, Bert, *see* Carpenter, Randall L.

Crews, James C.: *The Management of Chronic Pain—Second Edition*, Edited by A. W. Diamond and S. W. Coniam, 809

Criado, Ana B., *see* Gomez de Segura, Ignacio A.

Crnkovic, Anica, *see* Roberts, Kevin W.

Crowder, C. Michael, *see* van Swinderen, Bruno

Crystal, George J., *see* Koster, Andreas; *also see* Zhou, Xiping

Cui, Minglei, *see* Feng, Yi

Cullen, Bruce F., *see* MacLennan, Neil; *also see* Sarathy, Priya

Cusick, Jeffrey M.: *Worldwide Congress on Pain*, 1304

Dai, Hai B., *see* Park, Kyung W.

Damron, Derek S., *see* Kanaya, Noriaki

Dan, Kenjiro, *see* Sakuragi, Tadakazu

Davidson, Melissa L., *see* Ilbeigi, Mostafa Shahrokh

Davis, Steve, *see* Lesitsky, Marc A.

Deanovic, Dubravka, *see* Strelbel, Stephan P.

Declerck, Christ, Hillel, Zak, Shih, Henry, Kuroda, Maxine, Connery, Cliff P., Thys, Daniel M.: A Comparison of Left Ventricular Performance Indices Measured by Transesophageal Echocardiography with Automated Border Detection, 341

DeGruttola, Victor, *see* Litwack, Robert S.

DeKock, Marc: In Reply, 1603

DeMajo, Wilfrid C., *see* Boylan, John F.

Dennis, Donn M., *see* Raatikainen, M. J. Pekka

deQuevedo, Robert, II, *see* Gottschalk, Allan

Derasari, Manjul, *see* Kirkpatrick, Anthony F.

Des Mesnards-Smaja, Véronique, *see* Mercier, Frédéric J.

Desmonts, Jean-Marie, *see* Juvin, Philippe

Dexter, Franklin, *see* Miura, Yoshihide; *also see* Warner, David S.; *also see* Zhou, Jinshi

Dhara, Sansasa Sekhar, *see* Ti, Lian Kah

Diachun, Carol Ann B., Brock-Utnie, John G., López, Jaime R., Ceranski, Jo Ann: Evoked Potential Monitoring and EKG: A Case of a Serious "Cardiac Arrhythmia", 1270

Dierdorf, Stephen F., *see* Bennie, Ruth E.

Djalali, Kourosh, *see* Boemke, Willehad

Döcke, Wolf D., *see* Hensel, Mario

Doering, Elana B., Hanson, C. William, Marshall, Carol, Marshall, Bryan E.: In Reply, 539

Dohi, Shuji, *see* Iida, Hiroki; *also see* Terazawa, Etsuji

Domino, Karen B., *see* Mure, Margaret A.

Donahue, Stephen M., Needleman, Steven M.: Potential Cause for Medication Administration Error, 800

Donner, Andrew, *see* Zomorodi, Katayoun

Dorje, Pema, *see* Stoneham, Mark D.

Dorman, Todd, *see* Balser, Jeffrey R.

Dounas, Mokhtar, *see* Mercier, Frédéric J.

Dowd, Noreen P., Cheng, Davy C. H., Karaski, Jacek M., Wong, David T., Munro, Jo A. Carroll, Sandler, Alan N.: Intraoperative Awareness in Fast-track Cardiac Anesthesia, 1068

Downs, John B., *see* Bratzke, Edward

Doyle, Anthony R., *see* Stoneham, Mark D.

Doyle, D. John: Informed Consent and "Reform" Jehovah's Witness Patients, 537

Dräger, Christiane, Benziger, David, Gao, Feng, Berde, Charles B.: Prolonged Intercostal Nerve Blockade in Sheep Using Controlled-release of Bupivacaine and Dexmethylasone from Polymer Microspheres, 969

Drasner, Kenneth, *see* Freedman, John M.; *also see* Sakura, Shinichi

Drews, Jürgen, *see* Fricker, Ruth M.

Drover, David R., Lemmens, Harry J. M.: Population Pharmacodynamics and Pharmacokinetics of Remifentanil as a Supplement to Nitrous Oxide Anesthesia for Elective Abdominal Surgery, 869

Du Manoir, Bertrand, *see* Alfonsi, Pascal

Dupont, Jacques, *see* Tavernier, Benoît

Durieux, Marcel E., *see* Höinemann, Christian W.

Düthorn, Ludwig, Steinberg, Hans Schulte, Häuser, Hannes, Neeser, Gertraud, Pracki, Pavel: Accidental Intravascular Placement of a Feeding Tube, 251

Dutta, Sandeep, Ebling, William F.: Formulation-dependent Brain and Lung Distribution Kinetics of Propofol in Rats, 678

Ebert, Thomas J., Robinson, Brian J., Uhrich, Toni D., Mackenthun, Arden, Pichotta, Philip J.: Recovery from Sevoflurane Anesthesia: A Comparison to Isoflurane and Propofol Anesthesia, 1524

Ebling, William F., *see* Dutta, Sandeep

Edwards, Michael, *see* Bauman, Glenn S.

Egan, Talmage D., Huizinga, Bernou, Gupta, Samir K., Jaarsma, Rudy L., Sperry, Richard J., Yee, James B., Muir, Keith T.: Remifentanil Pharmacokinetics in Obese versus Lean Patients, 562

Egerer, Karl, *see* Hensel, Mario

Eichelberger, James P., *see* Lustik, Stewart J.

Eisenach, James C., Todd, Michael M.: The

Internet: Where Do We Want to Go Tomorrow?, 817

Eisenach, James C., *see* Lauretti, Gabriela R.; *also see* Lavand'homme, Patricia; *also see* Pan, Hui-Lin; *also see* Shafer, Steven L.; *also see* Song, Ho-Kyung

Elfaqih, S. R., *see* Naguib, Mohamed

Elias, Mazin: Postoperative Acetaminophen and Warfarin. Undesirable Combination, 1296

El-Moalem, Habib E., *see* Booth, John V.

Elwood, Tom, Parker, Sally, Ramamoorthy, Chandra: Pediatric-Nasotracheal Intubation Made Atraumatic, 550

Endoh, Hiroshi, *see* Zhan, Ren-Zhi

Erb, Joachim M., Ramsay, James G.: Is Your Pulmonary Artery Catheter Shedding?, 543

Eriksson, Lars I., *see* Wyon, Nicholas

Erjavec, Miklavz K.: There Is No Golden Yardstick, 788

Everts, Erich A., Jr., *see* Henderson, Kristine H.

Ezri, Tiberiu, Steinmetz, Andrei, Geva, Daniel, Szumuk, Peter: Skin Vasomotor Reflex as a Measure of Depth of Anesthesia, 1281

## F

Faryniak, Barbara, *see* Germann, Peter

Faure, Eveline A. M., Cook, Richard I., Miles, David: Air Embolism during Anesthesia for Shoulder Arthroscopy, 805

Feng, Yi, Cui, Minglei, Al-Chaer, Elie D., Willis, William D.: Epigastric Antinociception by Cervical Dorsal Column Lesions in Rats, 411

Ferouz, Fazecula, *see* Arkoosh, Valerie A.

Ferrante, F. Michael, *see* Kim, Philip S.

Fierobe, Lisiane: In Reply, 798

Fillinger, Mary P., *see* Gallagher, John D.

Filoda, Klaus, *see* Kazmaier, Stephan

Findes, Alexander, *see* Blobner, Manfred

Finn, Henry A., *see* Renz, Cheryl L.

Fischler, Marc, *see* Mercier, Frédéric J.

Fiset, Pierre, *see* Plourde, Gilles

Fisher, Dennis M., Kelley, Scott D.: Pharmaceutical Practice Guidelines: Do They Actually Cost Money?, 269

Fish, Kevin J., *see* Gaba, David M.

Flanagan, Brendan, *see* Gaba, David M.

Fleisher, Martin, *see* Amar, David

Fogarty-Mack, Patricia, *see* Ostapkovich, Noelle D.

Fogh-Andersen, Niels, *see* Olsen, Niels Videndal

Foiret, Christine, *see* Mercier, Frédéric J.

Fourme, Thierry, Vieillard-Baron, Antoine,

Loubières, Yann, Julié, Catherine, Page, Bernard, Jardin, François: Early Fat Embolism after Liposuction, 782

Franks, John J., Wamil, Artur W., Janicki, Piotr K., Horn, Jean-Louis, Franks, William T., Janson, Victoria E., Vanaman, Thomas C., Brandt, Paul C.: Anesthetic-induced Alteration of  $Ca^{2+}$  Homeostasis in Neural Cells: A Temperature-sensitive Process That Is Enhanced by Blockade of Plasma Membrane  $Ca^{2+}$ -ATPase Isoforms, 149

Franks, William T., *see* Franks, John J.

Freedman, John M., Li, De-Kun, Drasner, Kenneth, Jaskela, Maria C., Larsen, Bradley, Wi, Soora, Spinal Anesthesia Study Group: Transient Neurologic Symptoms after Spinal Anesthesia: An Epidemiologic Study of 1,863 Patients, 633

Fricker, Ruth M., Hoerauf, Klaus H., Drewe, Jürgen, Kress, Hans G.: Secretion of Dantrolene into Breast Milk after Acute Therapy of a Suspected Malignant Hyperthermia Crisis during Cesarean Section, 1023

Frölich, Michael Arnold: Spontaneous Recovery after Discontinuation of Intraoperative Cardiopulmonary Resuscitation: Case Report, 1252

Fujinaga, Masahiko: Assessment of Teratogenic Effects of Lidocaine in Rat Embryos Cultured *In Vitro*, 1553

Fujita, Satoshi, Roerig, David L., Chung, Wynda W., Bosnjak, Zeljko J., Stowe, David F.: Volatile Anesthetics Do Not Alter Bradykinin-induced Release of Nitric Oxide or L-Citrulline in Crystallloid Perfused Guinea Pig Hearts, 421

Fujiwara, Naoshi, *see* Zhan, Ren-Zhi

Fukuda, Satoru, *see* Zhan, Ren-Zhi

Funk, Bonita L., *see* Booth, John V.

Furuya, Hitoshi, *see* Nishimura, Kenji; *also see* Tanaka, Yuu

Furuya, Ryousuke, Hirai, Akiko, Andoh, Tomio, Kudoh, Ichida, Okumura, Fukuchiyo: Successful Perioperative Management of a Patient with Parkinson's Disease by Enteral Levodopa Administration under Propofol Anesthesia, 261

Gaba, David M., Howard, Steven K., Flanagan, Brendan, Smith, Brian E., Fish, Kevin J., Botney, Richard: Assessment of Clinical Performance during Simulated Crises Using Both Technical and Behavioral Ratings, 8

Gabriel, Hani F., *see* Krock, Jeremy L.

Gaillat, Françoise Gaillat, *see* Papazian, Laurent

Galifianakis, Alex, *see* van Swinderen, Bruno

Gallagher, John D., Weindling, Steven N., Anderson, Glen, Fillinger, Mary P.: Effects of Sevoflurane on QT Interval in a Patient with Congenital Long QT Syndrome, 1569

Galle, Tina S., *see* Pedersen, Juri L.

Gambling, David R., Sharma, Shiv K., Ramin, Susan M., Lucas, Michael J., Leveno, Kenneth J., Wiley, Jackie, Sidawi, J., Elaine: A Randomized Study of Combined Spinal-Epidural Analgesia *versus* Intravenous Meperidine during Labor: Impact on Cesarean Delivery Rate, 1336

Gao, Feng, *see* Dräger, Christiane

Garcia, Eduardo, *see* Burton, Allen W.

Garrett, Sheryl, *see* Aranda, Margaret

Garton, Kyle, *see* Baxter, Pamela J.

Gatecel, Claire, *see* Payen, Didier

Gelb, Adrian W., *see* Badner, Neal H.

Geller, Eran, *see* Somma, Jacques; *also see* Zomorodi, Katayou

Gelman, Simon: Gary Strichartz: Life among Local Anesthetics, 820

Georges, Keith E., *see* Shih, Grace H.

Georgieff, Michael, *see* Hettrick, Douglas A.

Gerhardt, Mark A., *see* Booth, John V.

Germann, Peter, Pöschl, Gerald, Leitner, Christian, Urak, Georg, Ullrich, Roman, Faryniak, Barbara, Röder, Georg, Kaider, Alexandra, Sladen, Robert: Additive Effect of Nitric Oxide Inhalation on the Oxygenation Benefit of the Prone Position in the Adult Respiratory Distress Syndrome, 1401

Geva, Daniel, *see* Ezri, Tiberiu

Gevirtz, Clifford M., *see* Nishio, Masako

Giannotti, Andrew G., *see* Abramson, David C.

Ginsburg, Ilana, *see* Amar, David

Glenny, Robb W., *see* Mure, Margaret

Goarin, Jean-Pierre, *see* Lenfant, François

Goiny, Michel, *see* Rane, Kerstin

Gomez de Segura, Ignacio A., Criado, Ana B., Santos, Martin, Tendillo, Francisco J.: Aspirin Synergistically Potentiates Isoflurane Minimum Alveolar Concentration Reduction Produced by Morphine in the Rat, 1489

Gomez, Mark N.: Magnesium and Cardiovascular Disease, 222

Gommers, Diederik, *see* Verbrugge, Serge J. C.

Goto, Takahisa, *see* Ichinose, Fumito

Gottschalk, Allan, Heiman-Patterson, Terry, deQuevedo, Robert, II, Quinn, Peter D.: General Anesthesia for a Patient with Centronuclear (Myotubular) Myopathy, 1018

Goudas, Leonidas C., Carr, Daniel B.: Value

## AUTHOR INDEX TO VOLUME 89

of Presenting the Time-course of Pain Relief in Analgesic Trials, 1602

Gouin, François, *see* Papazian, Laurent

Gracey, Richard H., *see* Sang, Christine N.

Gramling-Babb, Patricia, *see* Greene, Elliott S.

Gravenstein, J. S.: In Reply, 794

Greene, Elliott S., Berry, Arnold J., Jagger, Janine, Hanley, Eileen, Arnold, William P., III, Bailey, Melinda K., Brown, Morris, Gramling-Babb, Patricia, Passamante, Anthony N., Seltzer, Joseph L., Southorn, Peter, Van Cleaf, Martha A., Venezia, Richard A.: Multicenter Study of Contaminated Percutaneous Injuries in Anesthesia Personnel, 1362

Gregoire, Régine, *see* Papazian, Laurent

Gregoretti, Sergio: *Red Cell Transfusion: A Practical Guide*. Edited by Marion E. Reid and Sandra J. Nance, 1301

Grocott, Hilary P., *see* Miura, Yoshihide

Groeben, Harald, Silvanus, Marie-Theres, Beste, Mechthild, Peters, Jürgen: Combined Intravenous Lidocaine and Inhaled Salbutamol Protect against Bronchial Hyperreactivity More Effectively than Lidocaine or Salbutamol Alone, 862

Gross, Jeffrey B., *see* Babenco, H. Daniel

Gueugniaud, Pierre-Yves, *see* Vivien, Benoît

Guinard, Nathalie, *see* Cholley, Bernard P.; *also see* Payen, Didier

Gunter, Joel B.: Hypoxic Apnea, Epidural Anesthesia, and Infants, 1285

Gupta, Samir K., *see* Egan, Talmage D.

**H**

Habibzadeh, Farrokh, Yadollahie, Mahboobeh: Temperature Correction of the Calculated Alveolar Oxygen Tension, 1042

Hachenberg, Thomas, *see* Tenling, Arne

Haering, Michael, *see* Maslow, Andrew

Hakola, Pasi, *see* Scheinin, Harry

Halameck, Betty L., *see* Heine, Timothy A.

Hallwill, John R., Hewitt, Scott A., Joyner, Michael J., Warner, Mark A.: Effect of Various Lithotomy Positions on Lower-extremity Blood Pressure, 1373

Halpern, Jerry W., *see* Cohen, Sheila E.; *also see* Ratner, Emily F.; *also see* Riley, Edward T.

Hamilton, Robert G., *see* Brown, Robert H.

Hammer, Gregory B., Cao, Sean, Boltz, Madalane Gail, Messner, Anna: Post-transplant Lymphoproliferative Disease May Present with Severe Airway Obstruction, 263

Hänel, Frank, Von Knobelsdorff, Georg, Werner, Christian, Schulte am Esch, Jochen: Hypercapnia Prevents Jugular Bulb Desaturation during Rewarming from Hypothermic Cardiopulmonary Bypass, 19

Hanley, Eileen, *see* Greene, Elliott S.

Hanna, Mark P., *see* Bennie, Ruth E.

Hanouz, Jean-Luc, *see* Vivien, Benoît

Hansen, Jesper Melchior, *see* Olsen, Niels Vidiendal

Hanson, C. William, *see* Doering, Elana B.

Hardy, Jean-François, *see* Lamontagne, Christine

Harioka, Tokuya, Hosoi, Satoshi, Nomura, Koichiro: Foreign Body in the Trachea Originated from the Inner Wall of the Univent® Tube, 1596

Harris, Stephen N., *see* Perrino, Albert C., Jr.

Haruna, Masaki, Kumon, Keiji, Yahagi, Naoki, Watanabe, Yasuhiko, Ishida, Yoshiro, Kobayashi, Naoki, Aoyagi, Takuo: Blood Volume Measurement at the Bedside Using ICG Pulse Spectrophotometry, 1322

Hashimoto, Hiroshi, *see* Kotani, Naoki

Hatch, David, *see* Brown, Karen

Häuser, Hannes, *see* Dürthorn, Ludwig

Hauth, John C., *see* Shih, Grace H.

Hayden, John, *see* Sprung, Juraj

Haythornthwaite, Jennifer, *see* Raja, Srinivas N.

Heath, Karen J., Woulfe, John, Lownie, Stephen, Pelz, David, Munoz, David G., Mezon, Bernard: A Devastating Complication of Inadvertent Carotid Artery Puncture, 1273

Hede, Vidyadhar, *see* Kirkpatrick, Anthony F.

Hedenstierna, Göran, *see* Tenling, Arne

Heiman-Patterson, Terry, *see* Gottschalk, Alan

Heimbach, David M., *see* MacLennan, Neil

Heine, Timothy A., Halameck, Betty L., Mark, Jonathan B.: Fatal Pulmonary Fat Embolism in the Early Postoperative Period, 1589

Helminen, Antti, *see* Scheinin, Harry

Hemmings, Hugh C., Jr., *see* Murugaiah, Kamala D.

Henderson, Blair T., *see* Thomson, Ian R.

Henderson, Kristine H., Everts, Erich A., Jr., Upton, Joseph: Upper Extremity Veno-arterial Shunting during Pediatric Orthotopic Liver Transplantation, 1247

Henke, Julia, *see* Blobner, Manfred

Hensel, Mario, Volk, Thomas, Döcke, Wolf D., Kern, Florian, Tschirna, Dirk, Egerer, Karl, Konertz, Wolfgang, Kox, Wolfgang J.: Hyperprocalcitonemia in Patients with Noninfectious SIRS and Pulmonary Dysfunction Associated with Cardiopulmonary Bypass, 93

Henson, Lindsey C., *see* Cartwright, Christopher R.

Hester, Paul, *see* Wolfe, Darren

Hettick, Douglas A., Pagel, Paul S., Kersten, Judy R., Tessmer, John P., Bosnjak, Zeljko J., Georgieff, Michael, Warltier, David C.: Cardiovascular Effects of Xenon in Isoflurane-anesthetized Dogs with Dilated Cardiomyopathy, 1166

Hettick, Douglas A., *see* Pagel, Paul S.

Hetzer, Roland, *see* Koster, Andreas

Hewitt, Scott A., *see* Hallwill, John R.

Higuchi, Hideyuki, Sumita, Shinji, Wada, Hiroki, Ura, Tatsuya, Ikemoto, Takeshi, Nakai, Tetsuji, Kanno, Masayuki, Satoh, Tetsuo: Effects of Sevoflurane and Isoflurane on Renal Function and on Possible Markers of Nephrotoxicity, 307

Hilbert, Ulrich, *see* Cholley, Bernard P.

Hillel, Zak, *see* Declerck, Christ

Hindman, Bradley J.: Choice of  $\alpha$ -stat or pH-stat Management and Neurologic Outcomes after Cardiac Surgery: It Depends, 5

Hindman, Bradley J.: Jugular Venous Hemoglobin Desaturation during Rewarming on Cardiopulmonary Bypass: What Does It Mean, What Does It Matter, 3

Hines, Michael H., *see* Prielipp, Richard C.

Hirabayashi, Yoshihiro, Konishi, Ruriko, Shimizu, Reiju: Neurologic Symptom Associated with a Repeated Injection after Failed Spinal Anesthesia, 1294

Hiraga, Kazuaki, *see* Saito, Toshiyuki

Hirai, Akiko, *see* Furuya, Ryousuke

Hirata, Kazuhiko, *see* Sakuragi, Tadakazu

Hirose, Munetaka, Imai, Hiroto, Ohmori, Misako, Matsumoto, Yasunori, Amaya, Fumimasa, Hosokawa, Toyoshi, Tanaka, Yoshifumi: Heart Rate Variability during Chemical Thoracic Sympathectomy, 666

Hlastala, Michael P., *see* Mure, Margaret A.

Ho, Angie C. Y., *see* Wang, Yung-Liang

Hoennemann, Christian W., *see* Sullivan, Lisa M.

Hoerauf, Klaus H., *see* Fricker, Ruth M.

Hoff, Gudrun, *see* Larsen, Brita

Hofstädter, Maura B., *see* Kain, Zeev N.

Hogan, Quinn H.: In Reply, 1286

Hogan, Quinn H., *see* Carpenter, Randall L.

Hoka, Sumio, Yamaura, Ken, Takenaka, Tomoaki, Takahashi, Shosuke: Propofol-induced Increase in Vascular Capacitance Is Due to Inhibition of Sympathetic Vasoconstrictive Activity, 1495

Hollier, Larry H., *see* Kahn, Ronald A.; *also see* Moskowitz, David M.

## AUTHOR INDEX TO VOLUME 89

Holzman, Robert S.: The Legacy of Atropos, the Fate Who Cut the Thread of Life, 241  
 Holzman, Robert S., Katz, Jonathan D.: Occupational Latex Allergy: The End of the Innocence, 287  
 Hönenmann, Christian W., Washington, Jackie, Hönenmann, Mechthild C., Nietgen, Gregor W., Durieux, Marcel E.: Partition Coefficients of Volatile Anesthetics in Aqueous Electrolyte Solutions at Various Temperatures, 1032  
 Hönenmann, Mechthild C., *see* Hönenmann, Christian W.  
 Hood, David D., *see* Lauretti, Gabriela R.; *also see* Shafer, Steven L.  
 Hori, Koichiro, *see* Sakuragi, Tadakazu  
 Horn, Ernst-Peter, Sessler, Daniel I., Standl, Thomas, Schroeder, Frank, Bartz, Hans-Jürgen, Beyer, Juan Carlos, Schulte am Esch, Jochen: Non-thermoregulatory Shivering in Patients Recovering from Isoflurane or Desflurane Anesthesia, 878  
 Horn, Jean-Louis, *see* Franks, John J.  
 Horrow, Jan C., *see* Bennett, Joel A.  
 Hosoi, Satoshi, *see* Harioka, Tokuya  
 Hosokawa, Toyoshi, *see* Hirose, Munetaka  
 Hostetter, Meredith P., *see* Sang, Christine N.  
 Houghton, Andrea K., Valdez, Joe G., Westlund, Karin N.: Peripheral Morphine Administration Blocks the Development of Hyperalgesia and Allodynia after Bone Damage in the Rat, 190  
 Houwertjes, Martin C., *see* Beaufort, Ton M.  
 Howard, Steven K., *see* Gaba, David M.  
 Hsieh, Jing-Ru, *see* Wang, Yung-Liang  
 Hu, Delphine, *see* Kohane, Daniel S.  
 Huang, Wenzheng, *see* Balser, Jeffrey R.  
 Hudson, Robert J., *see* Thomson, Ian R.  
 Huffnagle, H. Jane, *see* Arkos, Valerie A.  
 Huffnagle, Suzanne, *see* Arkos, Valerie A.  
 Huizinga, Bernou, *see* Egan, Talmage D.

## I

Ichinose, Fumito, Mi, Wei-dong, Miyazaki, Miyuki, Onouchi, Tsuneko, Goto, Takahisa, Morita, Shigeo: Lack of Correlation between the Reduction of Sevoflurane MAC and the Cerebellar Cyclic GMP Concentrations in Mice Treated with 7-Nitroindazole, 143  
 Iida, Hiroki, Ohata, Hiroto, Iida, Mami, Watanabe, Yukinaga, Dohi, Shuji: Isoflurane and Sevoflurane Induce Vasodilation of Cerebral Vessels *via* ATP-sensitive K<sup>+</sup> Channel Activation, 954  
 Iida, Mami, *see* Iida, Hiroki  
 Iijima, Takehiko, Iwao, Yasuhide, Sankawa,

Hiroshi: Circulating Blood Volume Measured by Pulse Dye-Densitometry: Comparison with <sup>131</sup>I-HSA Analysis, 1329  
 Ikeda, Kazuyuki, *see* Kazama, Tomie  
 Ikemoto, Takeshi, *see* Higuchi, Hideyuki  
 Ilbeigi, Mostafa Shahrokh, Davidson, Melissa L., Yarmush, Joel M.: An Unexpected Arousal Effect of Etomidate in a Patient on High-dose Steroids, 1587  
 Imai, Hiroto, *see* Hirose, Munetaka  
 Inomata, Shinichi, *see* Suwa, Tomohide  
 Isaacs, Hyam, *see* Brooksbank, Richard L.  
 Ishida, Yoshio, *see* Haruna, Masaki  
 Isono, Shiroh: In Reply, 542  
 Iwao, Yasuhide, *see* Iijima, Takehiko  
 Iyer, Ramswamy A., *see* Uttamsingh, Vinita  
 Izdes, Seval, *see* Ozturk, Ertan

## J

Jaarsma, Rudy L., *see* Egan, Talmage D.  
 Jackman, Warren M., *see* Asirvatham, Sam J.  
 Jackson, Elizabeth, *see* Brown, Karen  
 Jacobsohn, Eric, *see* Aronson, Solomon  
 Jacobson, Louis, Chabal, Charles, Mariano, Anthony J., Chaney, Edmund F.: In Reply, 789  
 Jagger, Janine, *see* Greene, Elliott S.  
 James, Christopher F., *see* Marshall, Kenneth A.  
 Jammes, Yves, *see* Papazian, Laurent  
 Janicki, Piotr K., *see* Franks, John J.  
 Janson, Victoria E., *see* Franks, John J.  
 Jardin, François, *see* Fourme, Thierry  
 Jaskela, Maria C., *see* Freedman, John M.  
 Jelen-Esselborn, Sabine, *see* Blobner, Manfred  
 Joensen, Henning, *see* Wyon, Nicholas  
 Johnson, Tom W., *see* Asirvatham, Sam J.  
 Johnston, K. Wayne, *see* Boylan, John F.  
 Jones, Keith A., *see* Kai, Tetsuya  
 Joos, Stephane, Van Steenberge, Albert: Does Anesthesiology Like History, Repeat Itself?, 542  
 Jordi, Eva-Maria, Marsch, Stephan C. U., Strelbel, Stephan: Third Degree Heart Block and Asystole Associated with Spinal Anesthesia, 257  
 Joseph, Ninos J., *see* Baraka, Anis  
 Joshi, Girish P., Latham, Paige: In Reply, 1601  
 Joshi, Shailendra, Sciacca, Robert R., Solangi, Daneshvari S., Young, William L., Mathru, Mali M.: A Prospective Evaluation of Clinical Tests for Placement of Laryngeal Mask Airways, 1141  
 Josten, Klaus U., Wolf, Hannes, Schäfer, Robert Dietrich: Obstetric Anesthesia 1988-1996 in Northrhine, Germany: Re-

sults of the Perinatal Survey at the Chambers of Physicians, 1288  
 Joyner, Michael J., *see* Halliwill, John R.  
 Julié, Catherine, *see* Fourme, Thierry  
 Juvin, Philippe, Desmonts, Jean-Marie: Cardiac Massage: A Method Rescued from Oblivion, 771

## K

Kaczmarczyk, Gabriele, *see* Boemke, Willehad  
 Kadoya, Tatsuo, *see* Nakura, Nariaki  
 Kahn, Ronald A., Marin, Michael L., Hollier, Larry H.: In Reply, 1037  
 Kahn, Ronald A., *see* Moskowitz, David M.  
 Kaider, Alexandra, *see* Germann, Peter  
 Kain, Zeev N., Mayes, Linda C., Wang, Shuming, Caramico, Lisa A., Hofstadter, Maura B.: Parental Presence during Induction of Anesthesia *versus* Sedative Pre-meditation: Which Intervention Is More Effective?, 1147  
 Kain, Zeev N., *see* Koch, Marc E.  
 Kai, Tetsuya, Jones, Keith A., Warner, David O.: Halothane Attenuates Calcium Sensitization in Airway Smooth Muscle by Inhibiting G-proteins, 1543  
 Kamaya, Hiroshi, *see* Taylor, James  
 Kanadianian, Karen V., *see* Reynolds, Deborah S.  
 Kanaya, Noriaki, Zakhary, Daniel R., Murray, Paul A., Damron, Derek S.: Differential Effects of Fentanyl and Morphine on Intracellular Ca<sup>2+</sup> Transients and Contraction in Rat Ventricular Myocytes, 1532  
 Kanaya, Noriaki, Zakhary, Daniel R., Murray, Paul A., Damron, Derek S.: Thiopental Alters Contraction, Intracellular Ca<sup>2+</sup>, and pH in Rat Ventricular Myocytes, 202  
 Kaneko, Megumi, *see* Saito, Yoji  
 Kanno, Masuyuki, *see* Higuchi, Hideyuki  
 Kanstrup, Inge-Lis, *see* Olsen, Niels Videndal  
 Kaphan, Elsa, *see* Papazian, Laurent  
 Karhuvaara, Sakari, *see* Scheinin, Harry  
 Karski, Jacek M., *see* Dowd, Noreen P.  
 Karzai, Waheedullah, *see* Klein, Uwe  
 Kasai, Kyomi, *see* Segawa, Hajime  
 Katz, Joel, *see* Boylan, John F.  
 Katz, Jonathan D., *see* Holzman, Robert S.  
 Kavanagh, Brian P., *see* Boylan, John F.  
 Kawaguchi, Masahiko, *see* Nishimura, Kenji; *also see* Tanaka, Yuu  
 Kawai, Kouji, *see* Kawata, Ryuichi  
 Kawata, Ryuichi, Nakamura, Kazuhiko, Matsumoto, Mishiya, Kawai, Kouji, Kunihiro, Mitsu, Sakabe, Takefumi: Cerebro-vascular CO<sub>2</sub> Reactivity during Anesthesia

## AUTHOR INDEX TO VOLUME 89

in Patients with Diabetes Mellitus and Peripheral Vascular Disease, 887

Kaya, Kadir, *see* Ozturk, Ertan

Kazama, Tomie, Ikeda, Kazuyuki, Morita, Koji: The Pharmacodynamic Interaction between Propofol and Fentanyl with Respect to the Suppression of Somatic or Hemodynamic Responses to Skin Incision, Peritoneum Incision, and Abdominal Wall Retraction, 894

Kazmaier, Stephan, Weyland, Andreas, Buhre, Wolfgang, Stephan, Heidrun, Rieke, Horst, Filoda, Klaus, Sonntag, Hans: Effects of Respiratory Alkalosis and Acidosis on Myocardial Blood Flow and Metabolism in Patients with Coronary Artery Disease, 831

Kehlet, Henrik, *see* Pedersen, Juri L.

Keifer, John C., Kingsley, Charles P., Roth, Maria T., Abt, Arthur B., Romano, Paula J.: Transfusion-related Acute Lung Injury (TRALI) Complicating Colectomy for Ulcerative Colitis, 1020

Keil, Ralph L., *see* Wolfe, Darren

Kelley, Scott D., *see* Fisher, Dennis M.

Kermarrec, Nathalie, *see* Payen, Didier

Kern, Florian, *see* Hensel, Mario

Kersten, Judy R., *see* Hettrick, Douglas A.; *also see* Pagel, Paul S.

Khan, M. Ibrahim: Management of Chronic Nonmalignant Pain, 788

Kharasch, Evan D., *see* Baxter, Pamela J.

Kikuchi, Atsuhiko, *see* Kotani, Naoki

Kim, Jin-Soo, *see* Rampil, Ira J.

Kim, Philip S., Ferrante, F. Michael: Cryoanalgesia: A Novel Treatment for Hip Adductor Spasticity and Obturator Neuralgia, 534

Kim, Young D., *see* Shin, Young K.

Kindler, Christoph, *see* Streb, Stephan P.

Kingsley, Charles P., *see* Keifer, John C.

Kirihara, Yumiko, *see* Saito, Yoji

Kirkpatrick, Anthony F., Derasari, Manjul, Hede, Vidyadhar: Bowing of the Needle Technique for Nerve Blocks, 1606

Kirsch, Jeffrey R., *see* Bhardwaj, Anish

Kitaguchi, Katsuyasu, *see* Nishimura, Kenji; *also see* Tanaka, Yuu

Kitajima, Toshimitsu, *see* Okuda, Yasuhisa

Klausen, Tom, *see* Olsen, Niels Vidiuren

Klein, Uwe, Karzai, Waheedullah: In Reply, 1283

Klinck, John R., *see* Boylan, John F.

Knighton, John D., *see* Stoneham, Mark D.

Knoll, Rainer, *see* Koppert, Wolfgang

Kobayashi, Naoki, *see* Haruna, Masaki

Koch, Marc E., Kain, Zeev N., Ayoub, Chakib, Rosenbaum, Stanley H.: The Sedative and Analgesic Sparing Effect of Muscic, 300

Kochs, Eberhard, *see* Blobner, Manfred

Kohane, Daniel S., Sankar, Wudbhav N., Shubina, Maria, Hu, Delphine, Rifai, Nader, Berde, Charles B.: Sciatic Nerve Blockade in Infant, Adolescent, and Adult Rats: A Comparison of Ropivacaine with Bupivacaine, 1199

Kohane, Daniel S., Yieh, Jamie, Lu, Nu T., Langer, Robert, Strichartz, Gary R., Berde, Charles B.: A Re-examination of Tetrodotoxin for Prolonged Duration Local Anesthesia, 119

Kohro, Shinji, *see* Yamakage, Michiaki

Komatsu, Hisao, Nogaya, Junko, Kuratani, Norifumi, Ueki, Masaaki, Yokono, Satoshi, Ogli, Kenji: Repetitive Post-training Exposure to Enflurane Modifies Spatial Memory in Mice, 1184

Konertz, Wolfgang, *see* Hensel, Mario

Konishi, Ruriko, *see* Hirabayashi, Yoshihiro

Kon, Neal D., *see* Meek, Eric N.; *also see* Priell, Richard C.

Koppert, Wolfgang, Zeck, Susanne, Sittl, Reinhard, Likar, Rudolf, Knoll, Rainer, Schmelz, Martin: Low-dose Lidocaine Suppresses Experimentally Induced Hyperalgesia in Humans, 1345

Kosaka, Yoshihiro, *see* Saito, Yoji

Kostamovaara, Päivi A., *see* Laurila, Jouko J.

Koster, Andreas, Kuppe, Hermann, Hetzer, Roland, Sodian, Ralf, Crystal, George J., Mertzlufft, Friedrich: Emergent Cardiopulmonary Bypass in Five Patients with Heparin-induced Thrombocytopenia Type II Employing Recombinant Hirudin, 777

Kotani, Naoki, Hashimoto, Hiroshi, Sessler, Daniel I., Kikuchi, Atsuhiko, Suzuki, Akiko, Takahashi, Satoshi, Murakami, Masa-toshi, Matsuki, Akitomo: Intraoperative Modulation of Alveolar Macrophage Function during Isoflurane and Propofol Anesthesia, 1125

Kox, Wolfgang J., *see* Hensel, Mario

Kream, Richard M., *see* Bokesch, Paula M.

Krebs, Martin O., *see* Boenke, Willehad

Kress, Hans G., *see* Fricker, Ruth M.

Krock, Jeremy L., Padda, Gurpreet S., Gabriel, Hani F.: Defeating Proprietary Technology, 1292

Kudo, Ichidai, *see* Furuya, Ryousuke

Kuhn, Cynthia M., *see* Booth, John V.

Kumon, Keiji, *see* Haruna, Masaki

Kunihiro, Mitsuru, *see* Kawata, Ryuichi

Kuppe, Hermann, *see* Koster, Andreas

Kuratani, Norifumi, *see* Komatsu, Hisao

Kuroda, Maxine, *see* Declerck, Christ

Kurth, C. Dean, O'Rourke, Maureen M., *see* Lavand'homme, Patricia, Pan, Hui-Lin, Eisenach, James C.: Intrathecal Neostigmine, but Not Sympathectomy, Relieves Mechanical Allodynia in a Rat Model of Neuropathic Pain, 493

Lebuffe, Gilles, *see* Tavernier, Benoît

Lecarpentier, Yves, *see* Vivien, Benoît

Leckie, Robert, *see* Maslow, Andrew

O'Hara, Irene B.: Comparison of pH-stat and Alpha-stat Cardiopulmonary Bypass on Cerebral Oxygenation and Blood Flow in Relation to Hypothermic Circulatory Arrest in Piglets, 110

Kurz, Andrea, *see* Lenhardt, Rainer

Kuschinsky, Wolfgang, *see* Lenz, Christian

Kwatra, Madan M., *see* Booth, John V.

## L

Lachmann, Burkhard, *see* Verbrugge, Serge J. C.

Lagasse, Robert S., *see* Levine, Rhoda D.

Lambert, Donald H.: Transient Neurologic Symptoms when Phenylephrine Is Added to Tetracaine Spinal Anesthesia—An Alternative, 273

LaMontagne, Christine, Brouillet, Denis, Hardy, Jean-François: Incompatibility of Propofol Emulsion with Anesthetic Drugs, 1609

Landolfo, Kevin P., *see* Booth, John V.

Langer, Robert, *see* Kohane, Daniel S.

Laroche, Dominique, *see* Renz, Cheryl L.

Larsen, Bradley, *see* Freedman, John M.

Larsen, Brita, Hoff, Gudrun, Wilhelm, Wolfram, Buchinger, Heiko, Wanner, Guido A., Bauer, Michael: Effect of Intravenous Anesthetics on Spontaneous and Endotoxin-stimulated Cytokine Response in Cultured Human Whole Blood, 1218

Larson, C. Philip, Jr.: Laryngospasm—The Best Treatment, 1293

Larson, David A., *see* Bauman, Glenn S.

Larson, Merlin D., *see* Park, Paul C.

Latham, Paige, *see* Joshi, Girish P.

Lau, Mark, *see* Cohn, Aaron I.

Lauretti, Gabriela R.: *The Management of Pain*. Edited by Michael A. Ashburn and Linda J. Rice, 1610

Lauretti, Gabriela R.: Oral Etomidate, 1280

Lauretti, Gabriela R., Hood, David D., Eisenach, James C., Pfeifer, Ben L.: A Multi-center Study of Intrathecal Neostigmine for Analgesia following Vaginal Hysterectomy, 913

Laurila, Jouko J., Kostamovaara, Päivi A., Alahuhta, Seppo: *Streptococcus salivarius* Meningitis after Spinal Anesthesia, 1579

Lavand'homme, Patricia, Pan, Hui-Lin, Eisenach, James C.: Intrathecal Neostigmine, but Not Sympathectomy, Relieves Mechanical Allodynia in a Rat Model of Neuropathic Pain, 493

## AUTHOR INDEX TO VOLUME 89

Lee, Gloria, *see* Sang, Christine N.

Lehning, Ellen J., *see* Levine, Rhoda D.

Leighton, Barbara L., *see* Arkoush, Valerie A.

Leitner, Christian, *see* Germanmann, Peter

Lemmens, Harry J. M., *see* Drover, David R.

Le Moing, Jean-Pierre, *see* Alfonsi, Pascal

Lenfant, François, Cittanova, Marie-Laure, Goarin, Jean-Pierre, Riou, Bruno: Severe Hypercapnia Induced by Acute Dissecting Aortic Aneurysm, 780

Lenhardt, Rainer, Negishi, Chiharu, Sessler, Daniel L., Ozaki, Makoto, Tayefeh, Farzin, Kurz, Andrea: Paralysis Only Slightly Reduces the Febrile Response to Interleukin-2 during Isoflurane Anesthesia, 648

Lenhardt, Rainer, *see* Rampil, Ira J.

Lennon, Paul: No Evidence of Ischemic Preconditioning during Coronary Revascularization, 1601

Lentschner, Claude, Benhamou, Dan: The Blood Sparing Effect of Aprotinin Should Be Revisited, 1598

Lenz, Christian, Rebel, Annette, Van Ackern, Klaus, Kuschinsky, Wolfgang, Waschke, Klaus F.: Local Cerebral Blood Flow, Local Cerebral Glucose Utilization, and Flow-Metabolism Coupling during Sevoflurane versus Isoflurane Anesthesia in Rats, 1480

Leonard, Jason, *see* Cohn, Aaron I.

Leon, Brad, *see* Stone, Bradley A.

Lerman, Jerrold, *see* Agnor, Ross C.

Lesitsky, Marc A., Davis, Steve, Murray, Paul A.: Preservation of Hypoxic Pulmonary Vasoconstriction during Sevoflurane and Desflurane Anesthesia Compared to the Conscious State in Chronically Instrumented Dogs, 1501

Leung, Denis H. Y., *see* Amar, David

Leung, Jacqueline M.: Beta Blockade in Non-cardiac Surgical Patients, 795

Leveno, Kenneth J., *see* Gambling, David R.

Levine, Rhoda D., Sugarman, Michael, Schiller, Wilma, Weinshel, Sarah, Lehning, Ellen J., Lagasse, Robert S.: The Effect of Group Discussion on Interrater Reliability of Structured Peer Review, 507

Levron, Jean-Claude, *see* Alfonsi, Pascal

Li, De-Kun, *see* Freedman, John M.

Likar, Rudolf, *see* Koppert, Wolfgang

Lindahl, Sten G. E., *see* Wyon, Nicholas

Ling, Elizabeth, Warkentin, Theodore E.: Intraoperative Heparin Flushes and Subsequent Acute Heparin-induced Thrombocytopenia, 1567

Lipsett, Pamela, *see* Balsler, Jeffrey R.

Litt, Lawrence, *see* Auroy, Yves

Litwack, Robert S., DeGruttola, Victor: Predicting Long-term Postoperative Cardiovascular Outcomes, 1286

Liu, Spencer S., *see* Carpenter, Randall L.

Loeb, Alex L., Raj, Nichelle R., Longnecker, David E.: Cerebellar Nitric Oxide Is Increased during Isoflurane Anesthesia Compared to Halothane Anesthesia: A Microdialysis Study in Rats, 723

Long, Gary W., *see* Shih, Grace H.

Longnecker, David E., *see* Loeb, Alex L.

Lönnqvist, Per Arne: *Regional Anaesthesia for Babies and Children*. Edited by Jane M. Peutrell and Stephen Mather, 551

López, Jaime R., *see* Diachun, Carol Ann B.

Losser, Marie-Reine, *see* B'chir, Afef

Loubières, Yann, *see* Fourme, Thierry

Lowenstein, Edward, *see* Maslow, Andrew; *also see* Park, Kyung W.

Lowenwirt, Isaac, *see* Cohen, Shaul

Lownie, Stephen, *see* Heath, Karen J.

Lubarsky, David A.: In Reply, 270

Lucas, Michael J., *see* Gambling, David R.

Luginbühl, Martin, *see* Schnider, Thomas W.

Lu, Nu T., *see* Kohane, Daniel S.

Lu, Pao-Ping, *see* Wang, Yung-Liang

Lustik, Stewart J., Chhibber, Ashwani K., Eichelberger, James P.: Effects of Atenolol on Postoperative Myocardial Ischemia, 794

Lustik, Stewart J., Vogt, Alison, Chhibber, Ashwani K.: Postoperative Lactic Acidosis in Patients Receiving Metformin, 266

Luther, Martha A., *see* Perrino, Albert C., Jr.

Lynch, James P., *see* Renz, Cheryl L.

**M**

Macario, Alex, *see* Cohen, Sheila E.

MacDonald, John F., *see* McAdam, Laura C.

MacGregor, Drew A.: *Cardiopulmonary Critical Care, 3rd Edition*. Edited by David R. Dantzker and Steven M. Scharf, 1610

MacGregor, Drew A., *see* Priell, Richard C.

Mackenthun, Arden, *see* Ebert, Thomas J.

Mackersie, Angela, *see* Brown, Karen

MacLennan, Neil, Heimbach, David M., Cullen, Bruce F.: Anesthesia for Major Thermal Injury, 749

Madabhushi, Lakshmi, *see* Reuben, Scott S.

Magee, John C., *see* Munro, Hamish M.

Maier, Christoph, *see* Wulf, Hinrich

Makhotine, Olivier, *see* Tavernier, Benoît

Makita, Koshi, *see* Nakazawa, Koichi

Maltese, Giovanni, *see* Chello, Massimo

Manabat, Nancy C., *see* Zhou, Xiping

Mandabach, Mark G., McCann, Diedre A., Thompson, Gale E.: In Reply, 1279

Mangano, Dennis T.: In Reply, 1288

Marchand, James E., *see* Bokesch, Paula M.

Marchese, Antonietta R., *see* Chello, Massimo

Mariano, Anthony J., *see* Jacobson, Louis

Marin, Michael L., *see* Kahn, Ronald A.; *also see* Moskowitz, David M.

Mark, Jonathan B.: *Drugs in Anaesthesia and Intensive Care, Second Edition*. By Martin Sasaki and Susan Smith, 279

Mark, Jonathan B., *see* Heine, Timothy A.

Marsch, Stephan C. U., *see* Jordi, Eva-Maria

Marshall, Bryan E., *see* Doering, Elana B.

Marshall, Carol, *see* Doering, Elana B.

Marshall, Kenneth A., James, Christopher F.: Complication of Bullard Laryngoscope: Dislodgment of Blade-extender Resulting in an Upper Airway Foreign Body, 1604

Martinez, Elizabeth A., *see* Balsler, Jeffrey R.

Martin, Timothy J., *see* Meek, Eric N.

Maslow, Andrew, Lowenstein, Edward, Steriti, John, Leckie, Robert, Cohn, William, Haering, Michael: Left Ventricular Thrombi: Intraoperative Detection by Transesophageal Echocardiography and Recognition of a Source of Post CABG Embolic Stroke: A Case Series, 1257

Mastroroberto, Pasquale, *see* Chello, Massimo

Masue, Tatsuhiko, *see* Terazawa, Etsuji

Mateo, Joaquim, *see* Cholley, Bernard P.; *also see* Payen, Didier

Mathis, Johannes, *see* Schnider, Thomas W.

Mathru, Mal M., *see* Joshi, Shailendra

Matsuki, Akitomo, *see* Kotani, Naoki

Matsumoto, Mishiya, *see* Kawata, Ryuichi

Matsumoto, Yasunori, *see* Hirose, Munetaka

Matsuzaki, Takashi, *see* Yamakage, Michiaki

Matsuzawa, Yoshiyasu, *see* Nakazawa, Koi-chi

Max, Mitchell B., *see* Sang, Christine N.

Mayes, Linda C., *see* Kain, Zeev N.

McAdam, Laura C., MacDonald, John F., Orser, Beverley A.: Isobolographic Analysis of the Interactions between Midazolam and Propofol at GABA<sub>A</sub> Receptors in Embryonic Mouse Neurons, 1444

McCann, Diedre A., *see* Mandabach, Mark G.

McCunn, Maureen: *ITACCS (International Trauma Anesthesia and Critical Care Society)*, 554

Means, Lyn J., *see* Bennie, Ruth E.

Mebazaa, Alexandre, *see* B'chir, Afef

Meek, Eric N., Butterworth, John, Kon, Neal D., Zvara, David A., Ash, George E., Jr., Martin, Timothy J.: Pituitary Apoplexy following Mitral Valve Repair, 1580

Mehta, Navneet, *see* Tempe, Deepak K.

Mercier, Frédéric J., Dounas, Mokhtar, Bouaziz, Hervé, Des Mesnards-Smaja, Véronique, Foiret, Christine, Vestermann,

## AUTHOR INDEX TO VOLUME 89

Marie Noëlle, Fischler, Marc, Benhamou, Dan: The Effect of Adding a Minidose of Clonidine to Intrathecal Sufentanil for Labor Analgesia, 594

Mercker, Stephanie, *see* Wulf, Hinnerk

Mertzlufft, Friedrich, *see* Koster, Andreas

Messiah, Antoine, *see* Auroy, Yves

Messner, Anna, *see* Hammer, Gregory B.

Mezon, Bernard, *see* Heath, Karen J.

Mi, Wei-dong, *see* Ichinose, Fumito

Michelsen, Luis G., Zaffer, Rashid: Blood Loss from a Defective Needleless Arterial Sampling Port, 275

Mihm, Frederick G., *see* Aranda, Margaret

Mihm, Megan N., *see* Aranda, Margaret

Miles, David, *see* Faure, Eveline A. M.

Miro, Emilio, *see* Oms, Angel

Miura, Yoshihide, Grocott, Hilary P., Bart, Robert D., Pearlstein, Robert D., Dexter, Franklin, Warner, David S.: Differential Effects of Anesthetic Agents on Outcome from Near-complete but Not Incomplete Global Ischemia in the Rat, 391

Miyazaki, Miyuki, *see* Ichinose, Fumito

Mohan, Jagdish C., *see* Tempe, Deepak K.

Moore, James, *see* Carpenter, Randall L.

Moore, Matthew J.: In Reply, 544

Morey, Timothy E., *see* Raatikainen, M. J. Pekka

Moriarty, Denis C., *see* O'Gorman, David A.

Mori, Kenjiro, *see* Segawa, Hajime

Morita, Koji, *see* Kazama, Tomie

Morita, Shigeho, *see* Ichinose, Fumito

Morita, Yasuhiro, Takenoshita, Makoto: Laryngeal Mask Airway Fitted over a Tracheotomy Orifice: A Mean to Ventilate a Tracheotomized Patient during Induction of Anesthesia, 1295

Moskowitz, David M., Kahn, Ronald A., Camuñas, Jorge, Marin, Michael L., Hollister, Larry H.: External Chest Wall Stimulation to Suppress a Permanent Transvenous Pacemaker in a Patient during Endovascular Stent Graft Placement, 531

Moss, Jonathan, *see* Renz, Cheryl L.

Motsch, Johann, *see* Weigand, Markus A.

Muir, Keith T., *see* Egan, Talmage D.

Munoz, David G., *see* Heath, Karen J.

Munro, Hamish M., Snider, Sandra J., Magee, John C.: Halothane-associated Hepatitis in a 6-year-old Boy: Evidence for Native Liver Regeneration following Failed Treatment with Auxiliary Liver Transplantation, 524

Munro, Jo A. Carroll, *see* Dowd, Noreen P.

Murakawa, Masahiro, *see* Segawa, Hajime

Muraoka, Masatoshi, *see* Kotani, Naoki

Mure, Margaret, Domino, Karen B., Robertson, H. Thomas, Hlastala, Michael P., Glenny, Robb W.: Pulmonary Blood Flow Does Not Redistribute in Dogs with Reposition from Supine to Left Lateral Position, 483

Muret, Jane, *see* Payen, Didier

Murphy, Keith J., *see* O'Gorman, David A.

Murray, David J.: Clinical Simulation: Technical Novelty or Innovation in Education, 1

Murray, Paul A., *see* Kanaya, Noriaki; *also see* Lesitsky, Marc A.

Murugaiah, Kamala D., Hemmings, Hugh C., Jr.: Effects of Intravenous General Anesthetics on <sup>3</sup>HGABA Release from Rat Cortical Synaptosomes, 919

N

Nagase, Kiyoshi, *see* Terazawa, Etsuji

Naguib, Mohamed, Samarkandi, Abdulhamid H., Ammar, Adel, Elfaqih, S. R., Al-Zahrani, Salem, Turkistani, Ahmed: Comparative Clinical Pharmacology of Rocuronium, Cisatracurium, and Their Combination, 1116

Nakai, Tetsuji, *see* Higuchi, Hideyuki

Nakakimura, Kazuhiko, *see* Kawata, Ryuichi

Nakatani, Shin: In Reply, 1596

Nakazawa, Koichi, Uchida, Tokujiro, Matsuzawa, Yoshiyasu, Yokoyama, Kuninori, Makita, Koshi, Amaha, Keisuke: Treatment of Pulmonary Hypertension and Hypoxia Due to Oleic Acid Induced Lung Injury with Intratracheal Prostaglandin E<sub>1</sub> during Partial Liquid Ventilation, 686

Nakura, Nariaki, Takenaka, Ichiro, Kadoya, Tatsuo, Aoyama, Kazuyoshi: Problem in Measuring the Area of the Pharynx Endoscopically, 541

Namiki, Akiyoshi, *see* Toyoshima, Yuki; *also see* Yamakage, Michiaki

Narchi, Patrick, *see* Auroy, Yves

Naruke, Tsuguo, *see* Saito, Toshiyuki

Naughton, Norah N., *see* Polley, Linda S.

Needleman, Steven M., *see* Donahue, Stephen M.

Neeser, Gertraud, *see* Dürthorn, Ludwig

Neggers, Sebastian J. C. M. M., *see* Verbrugge, Serge J. C.

Negishi, Chiharu, *see* Lenhardt, Rainer; *also see* Rampil, Ira J.

Neumann, Günther, *see* Wulf, Hinnerk

Nielsen, Vance G.: *Anesthesia for Cardiac Surgery, 2nd edition.* Edited by James A. DiNardo, 1302

Nietgen, Gregor W., *see* Hönenmann, Christian W.

Nigam, Madhuri, *see* Tempe, Deepak K.

Nigrovic, Vladimir, *see* Beaufort, Ton M.

Nimmagadda, Usharani, Salem, M. Ramez: Acute Bronchospasm Associated with Methylmethacrylate Cement, 1290

Nishikawa, Toshiaki, *see* Tanaka, Makoto

Nishimura, Kenji, Kawaguchi, Masahiko, Shimokawa, Mitsuru, Kitaguchi, Katsuhashi, Furuya, Hitoshi: Treatment of Pulmonary Embolism during Cesarean Section with Recombinant Tissue Plasminogen Activator, 1027

Nishio, Masako, Choi, Chang-Shik, Govirtz, Clifford M.: High-concentration Cisatracurium in ICU Solution, 1605

Nishiyama, Tomoki, Yaksh, Tony L., Weber, Eckard: Effects of Intrathecal NMDA and Non-NMDA Antagonists on Acute Thermal Nociception and Their Interaction with Morphine, 715

Nogaya, Junko, *see* Komatsu, Hisao

Nomura, Koichiro, *see* Harioka, Tokuya

Norris, Mark C., *see* Arkoosh, Valerie A.

Nystrom, Elisabet U. M., Blomberg, Sture G., Buffington, Charles W.: Transmural Pressure of Epidural Veins in the Thoracic and Lumbar Spine of Pigs, 449

O

Oberoi, Mohinder P., *see* Asirvatham, Sam J.

O'Brien, James J.: In Reply, 1036

O'Connell, Alan W., *see* O'Gorman, David A.

Ogli, Kenji, *see* Komatsu, Hisao

O'Gorman, David A., O'Connell, Alan W., Murphy, Keith J., Moriarty, Denis C., Shiozaki, Tadashi, Regan, Ciaran M.: Nefiracetam Prevents Propofol-induced Anterograde and Retrograde Amnesia in the Rodent without Compromising Quality of Anesthesia, 699

O'Hara, Irene B., *see* Kurth, C. Dean

Ohata, Hiroto, *see* Iida, Hiroki

Ohmori, Misako, *see* Hirose, Munetaka

Okuda, Yasuhisa, Kitajima, Toshimitsu, Asai, Takashi: In Reply, 1285

Okumura, Fukuichiro, *see* Furuya, Ryosuke

Olhoeft, Alan R.: In Reply, 544

Olsen, Niels Vidiendal, Christensen, Henrik, Klausen, Tom, Fogh-Andersen, Niels, Plum, Inger, Kanstrup, Inge-Lis, Hansen, Jesper Melchior: Effects of Hyperventilation and Hypocapnic/Normocapnic Hypoxemia on Renal Function and Lithium Clearance in Humans, 1389

Oms, Angel, Miro, Emilio, Rojo, Jose-Emilio: Sumatriptan Was Effective in Electroconvulsive Therapy (ECT) Headache, 1291

O'Neill, Daniel, Capan, Levon M., Sheth, Rajul: Flexiguide Intubation Guide to Facilitate Airway Management with WuScope System, 545

## AUTHOR INDEX TO VOLUME 89

Onouchi, Tsuneko, *see* Ichinose, Fumito  
 Orkin, Frederick K.: In Reply, 1597  
 O'Rourke, Maureen M., *see* Kurth, C. Dean  
 Orser, Beverley A., *see* McAdam, Laura C.  
 Ortega, Rafael A.: A Rare Cause of Fire in the Operating Room, 1608  
 Ostapkovich, Noelle D., Baker, Kristy Z., Fogarty-Mack, Patricia, Sisti, Michael B., Young, William L.: Cerebral Blood Flow and  $\text{CO}_2$  Reactivity Is Similar during Remifentanil/ $\text{N}_2\text{O}$  and Fentanyl/ $\text{N}_2\text{O}$  Anesthesia, 358  
 Oyston, John: *Illustrated Notes in Regional Anesthesia*, 1613  
 Oyston, John: *Online Mendelian Inheritance in Man*, 811  
 Oyston, John: *World Anaesthesia Online*, 280  
 Ozaki, Makoto, *see* Lenhardt, Rainer  
 Ozturk, Ertan, Izdes, Seval, Babacan, Avni, Kaya, Kadir: Temperature of Propofol Does Not Reduce the Incidence of Injection Pain, 1041

## P

Padda, Gurpreet S., *see* Krock, Jeremy L.  
 Page, Bernard, *see* Fourme, Thierry  
 Pagel, Paul S., Hettrick, Douglas A., Kersten, Judy R., Warltier, David C.: Dexmedetomidine Produces Similar Alterations in the Determinants of Left Ventricular Afterload in Conscious Dogs before and after the Development of Pacing-induced Cardiomyopathy, 741  
 Pagel, Paul S., *see* Hettrick, Douglas A.  
 Pan, Hui-Lin, Chen, Shao-Rui, Eisenach, James C.: Role of Spinal NO in Antiallodynia Effect of Intrathecal Clonidine in Neuropathic Rats, 1518  
 Pan, Hui-Lin, *see* Lavand'homme, Patricia; *also see* Song, Ho-Kyung  
 Pantuck, Carol B., *see* Amar, David  
 Pantuck, Carol B., *see* Cohen, Shaul  
 Pantuck, Eugene J., *see* Cohen, Shaul  
 Papazian, Laurent, Bregeon, Fabienne, Gaillet, Françoise Gaillat, Kaphan, Elsa, Thiron, Xavier, Saux, Pierre, Badier, Monique, Gregoire, Régine, Gouin, François, Jammes, Yves, Auffray, Jean-Pierre: Does Norepinephrine Modify the Effects of Inhaled Nitric Oxide in Septic Patients with Acute Respiratory Distress Syndrome?, 1089  
 Parker, Sally, *see* Elwood, Tom  
 Park, Kyung W., Dai, Hai B., Lowenstein, Edward, Sellke, Frank W.: Flow-induced Dilatation of Rat Coronary Microvessels Is

Attenuated by Isoflurane but Enhanced by Halothane, 132

Park, Paul C., Berry, Peter D., Larson, Merlin D.: Total Spinal Anesthesia following Epidural Saline Injection after Prolonged Epidural Anesthesia, 1267  
 Passannante, Anthony N., *see* Greene, Elliott S.  
 Payen, Didier, Muret, Jane, Beloucif, Sadek, Gateccl, Claire, Kermarrec, Nathalie, Guinard, Nathalie, Mateo, Joaquim: Inhaled Nitric Oxide, Almitriptine Infusion, or Their Coadministration as a Treatment of Severe Hypoxic Focal Lung Lesions, 1157

Payen, Didier, *see* B'chir, Acef; *also see* Cholley, Bernard P.  
 Pearl, Ronald G., *see* Aranda, Margaret  
 Pearlstein, Robert D., *see* Miura, Yoshihide  
 Pearson, Kent S.: Emergency Informed Consent, 1047  
 Pedersen, Juri L., Galle, Tina S., Kehlet, Henrik: Peripheral Analgesic Effects of Ketamine in Acute Inflammatory Pain, 58  
 Pelz, David, *see* Heath, Karen J.  
 Pepler, Carolyn, *see* Choinière, Manon  
 Perdue, Philip W., *see* Balser, Jeffrey R.  
 Perel, Azriel: Assessing Fluid Responsiveness by the Systolic Pressure Variation in Mechanically Ventilated Patients, 1

Perreault, Sylvie, *see* Choinière, Manon  
 Perrino, Albert C., Jr., Harris, Stephen N., Luther, Martha A.: Intraoperative Determination of Cardiac Output Using Multiplane Transesophageal Echocardiography: A Comparison to Thermodilution, 350  
 Petersen-Felix, Steen, *see* Schnider, Thomas W.  
 Peters, Jürgen, *see* Groeben, Harald  
 Petroianu, Georg: Idiopathic Chronic Hiccup (ICH): Phrenic Nerve Block Is Not the Way to Go, 1284

Pfeifer, Ben L., *see* Lauretti, Gabriela R.  
 Pichotta, Philip J., *see* Ebert, Thomas J.  
 Pinosky, Mark, *see* Williams, Andrea R.  
 Pittet, Jean-François: *Trauma Anesthesia and Critical Care of Neurological Injury*. Edited by K. J. Abrams and C. M. Grande, 1301

Plant, Edward, *see* Reynolds, Deborah S.  
 Plourde, Gilles, Villemure, Chantal, Fiset, Pierre, Bonhomme, Vincent, Backman, Steven B.: Effect of Isoflurane on the Auditory Steady-state Response and on Consciousness in Human Volunteers, 844  
 Plum, Inger, *see* Olsen, Niels Vidiendal  
 Polley, Linda S., Columb, Malachy O., Wagner, Deborah S., Naughton, Norah N.: Dose-dependent Reduction of the Minimum Local Analgesic Concentration of Bupivacaine by Sufentanil for Epidural Analgesia in Labor, 626  
 Porter, Jackie, Bonello, Edric, Reynolds, Felicity: Effect of Epidural Fentanyl on Neonatal Respiration, 79

Pöschl, Gerald, *see* Germann, Peter  
 Pracki, Pavel, *see* Dürthorn, Ludwig  
 Preiser, Jean-Charles, Vincent, Jean-Louis: Specific Therapies of Biguanide-induced Lactic Acidosis, 267

Price, Janet M., Carpenter, Randall L.: Anesthesia Safety, Outcomes, and Prospective Study Design, 790  
 Priell, Richard C., MacGregor, Drew A., Royster, Roger L., Kon, Neal D., Hines, Michael H., Butterworth, John F., IV: Dobutamine Antagonizes Epinephrine's Biochemical and Cardiotonic Effects: Results of an *In Vitro* Model Using Human Lymphocytes and a Clinical Study in Patients Recovering from Cardiac Surgery, 49  
 Proost, Johannes H., *see* Beaufort, Tom M.

## Q

Quinn, Peter D., *see* Gottschalk, Allan

## R

Raatikainen, M. J., Pekka, Trankina, Mark F., Morey, Timothy E., Dennis, Donn M.: Effects of Volatile Anesthetics on Atrial and AV Nodal Electrophysiological Properties in Guinea Pig Isolated Perfused Heart, 434  
 Raj, Nichelle R., *see* Loeb, Alex L.  
 Raj, Srinivasa N., Haythornthwaite, Jennifer: *Quality of Life Assessment in Medicine. A CD-ROM for Windows, Issue 2*. Edited by Marcello Tamburini, 1043  
 Ramamoorthy, Chandra, *see* Elwood, Tom  
 Ramtin, Susan M., *see* Gambling, David R.  
 Rampil, Ira J.: A Primer for EEG Signal Processing in Anesthesia, 980  
 Rampil, Ira J.: Medical Information on the Internet, 1233  
 Rampil, Ira J., Kim, Jin-Soo, Lenhardt, Rainer, Negishi, Chiharu, Sessler, Daniel L.: Bispectral EEG Index during Nitrous Oxide Administration, 671  
 Ramsay, James, *see* Somma, Jacques  
 Ramsay, James G., *see* Erb, Joachim M.  
 Ramsey, James, *see* Zomorodi, Katayoun  
 Rane, Kerstin, Segerdahl, Märta, Goiny, Michel, Sollevi, Alf: Intrathecal Adenosine Administration: A Phase 1 Clinical Safety Study in Healthy Volunteers, with Addi-

## AUTHOR INDEX TO VOLUME 89

tional Evaluation of Its Influence on Sensory Thresholds and Experimental Pain, 1108

Ratner, Emily F., Hamilton, Catherine L.: Anesthesia for Cesarean Section in a Pituitary Dwarf, 253

Razumovsky, Jacob, *see* Beilin, Benzion

Rebel, Annette, *see* Lenz, Christian

Reddy, Shalini P., Cook-Sather, Scott D.: Pulse Oximetry Probe Adhesive Disks: A Potential for Infant Aspiration, 1603

Redl, Gerhard: Massive Pyramidal Tract Signs after Endotracheal Intubation: A Case Report of Spondyloepiphyseal Dysplasia Congenita, 1262

Regan, Ciaran M., *see* O'Gorman, David A.

Renz, Cheryl L., Laroche, Dominique, Thurn, John D., Finn, Henry A., Lynch, James P., Thisted, Ronald, Moss, Jonathan: Tryptase Levels Are Not Increased during Vancomycin-induced Anaphylactoid Reactions, 620

Reuben, Scott S., Steinberg, Robert B., Madabhushi, Lakshmi, Rosenthal, Erik: Intravenous Regional Clonidine in the Management of Sympathetically Maintained Pain, 527

Reuben, Scott S., *see* Connelly, Neil Roy

Reynolds, Deborah S., Plant, Edward, Bancroft, M. Lee, Kanadianian, Karen V., Comunale, Mark E.: Electrical Fires in Hewlett-Packard Monitors Due to Saline Contamination, 521

Reynolds, Felicity, *see* Porter, Jackie

Riecke, Horst, *see* Kazmaier, Stephan

Rifai, Nader, *see* Kohane, Daniel S.

Riley, Edward T., Hamilton, Catherine L., Cohen, Sheila E.: Intrathecal Sufentanil Produces Sensory Changes without Hypotension in Male Volunteers, 73

Riley, Edward T., *see* Cohen, Sheila E.

Ringwalt, Eric C.: Use of a Guide Wire to Facilitate Tracheal Intubation with the Bullard Laryngoscope, 805

Riou, Bruno, *see* Lenfant, François; *also see* Vivien, Benoit

Rittenhouse, Brian E., *see* Choinière, Manon

Roberts, Kevin W., Crnkovic, Anica, Steiniger, Joseph R.: Post-anesthesia Paradoxical Vocal Cord Motion Successfully Treated with Midazolam, 517

Robertson, H. Thomas, *see* Mure, Margaret A.

Robinson, Brian J., *see* Ebert, Thomas J.

Röder, Georg, *see* Germann, Peter

Roerig, David L., *see* Fujita, Satoshi

Roistacher, Nancy, *see* Amar, David

Rojo, Jose-Emilio, *see* Oms, Angel

Romano, Paula J., *see* Keifer, John C.

Romieu, Michel, *see* B'chir, Atef

Rosen, Michael: Replacement of Air by Carbon Dioxide, 1036

Rosenbaum, Stanley H., *see* Koch, Marc E.

Rosenberg, Andrew D., Young, Marjorie, Bernstein, Ralph L., Albert, David B.: Tongue Rings: Just Say No, 1279

Rosenfeld, Brian A., *see* Balser, Jeffrey R.

Rosenthal, Erik, *see* Reuben, Scott S.

Roth, Maria T., *see* Keifer, John C.

Rousseau, Pierre, *see* Choinière, Manon

Rouvier, Bernard, *see* Auroy, Yves

Rowlingson, John C.: In Reply, 275

Royster, Roger L., *see* Priepli, Richard C.

Ruskin, Keith J.: The Internet: A Practical Guide for Anesthesiologists, 1003

**S**

Saito, Shigeyuki, *see* Suwa, Tomohide

Saito, Toshiyuki, Naruke, Tsuguo, Carney, Edward, Yokokawa, Yoko, Hiraga, Kazuaki, Carlsson, Christer: New Double Intrabronchial Tube (Naruke Tube) for Tracheostomized Patients, 1038

Saito, Yoji, Kaneko, Megumi, Kirihara, Yumiko, Sakura, Shinichi, Kosaka, Yoshihiro: Interaction of Intrathecally Infused Morphine and Lidocaine in Rats (Part I): Synergistic Antinociceptive Effects, 1455

Saito, Yoji, Kaneko, Megumi, Kirihara, Yumiko, Sakura, Shinichi, Kosaka, Yoshihiro: Interaction of Intrathecally Infused Morphine and Lidocaine in Rats (Part II): Effects on the Development of Tolerance to Morphine, 1464

Sakabe, Takefumi, *see* Kawata, Ryuichi

Sakai, Toshiko, *see* Shimokojin, Takeshi

Sakuragi, Tadakazu, Yasunaka, Kakuko, Hirata, Kazuhiko, Hori, Koichiro, Dan, Kenjiro: The Source of Epidural Infection following Epidural Analgesia Identified by Pulsed-field Gel Electrophoresis, 1254

Sakura, Shinichi, Drasner, Kenneth: In Reply, 274

Sakura, Shinichi, *see* Saito, Yoji

Salem, M. Ramez, *see* Baraka, Anis; *also see* Nimmagadda, Usharani; *also see* Zhou, Xiping

Samarkandi, Abdulhamid H., *see* Naguib, Mohamed

Samii, Kamran, *see* Auroy, Yves

Sandler, Alan N., *see* Boylan, John F.; *also see* Dowd, Noreen P.

Sang, Christine N., Hostetter, Meredith P., Gracely, Richard H., Chappell, Amy S., Schoepp, Darryle D., Lee, Gloria, Whitcup, Scott, Caruso, Rafael, Max, Mitchell B.: AMPA/Kainate Antagonist LY293558 Reduces Capsaicin-evoked Hyperalgesia but Not Pain in Normal Skin in Humans, 1060

Sankar, Wudbhav N., *see* Kohane, Daniel S.

Sankawa, Hiroshi, *see* Iijima, Takehiko

Santangelo, Ermengildo, *see* Chello, Massimo

Santos, Martin, *see* Gomez de Segura, Ignacio A.

Sarathy, Priya, Cullen, Bruce F.: *Manual of Drug Interactions for Anesthesiology*. By Robert A. Mueller and Dag B. A. Lundberg, 810

Satoh, Tetsuo, *see* Higuchi, Hideyuki

Sauvé, Rémy, *see* Corbin, François

Saux, Pierre, *see* Papazian, Laurent

Savage, Nerina, *see* Brooksbank, Richard L.

Savage, Robert, *see* Aronson, Solomon

Schäfer, Robert Dietrich, *see* Josten, Klaus U.

Schauble, James F., *see* Brown, Robert H.

Scheinin, Harry, Aantaa, Riku, Anttila, Markku, Hakola, Pasi, Helminen, Antti, Karhuvaara, Sakari: Reversal of the Sedative and Sympatholytic Effects of Dexmedetomidine with a Specific  $\alpha_2$ -Adrenoceptor Antagonist Atipamezole: A Pharmacodynamic and Kinetic Study in Healthy Volunteers, 574

Schell, Dawn J.: *Textbook of Pain on CD-ROM*. Edited by Patrick D. Wall and Ronald Melzack, 552

Scherpereel, Philippe, *see* Tavernier, Benoît

Schiller, Wilma, *see* Levine, Rhoda D.

Schmelz, Martin, *see* Koppert, Wolfgang

Schnider, Thomas W., Luginbühl, Martin, Petersen-Felix, Steen, Mathis, Johannes: Unreasonably Low BIS Values in a Volunteer with Genetically Determined Low-voltage EEG Signals, 1607

Schoenwald, Peter K., *see* Sprung, Juraj

Schoepp, Darryle D., *see* Sang, Christine N.

Schroeder, Frank, *see* Horn, Ernst-Peter

Schulte am Esch, Jochen, *see* Horn, Ernst-Peter; *also see* Hänel, Frank

Schwinn, Debra A., *see* Booth, John V.

Sciaccia, Robert R., *see* Joshi, Shailendra

Segawa, Hajime, Mori, Kenjiro, Murakawa, Masahiro, Kasai, Kyomie, Shirakami, Gotaro, Adachi, Takehiko, Arai, Toshiyuki: Isoflurane and Sevoflurane Augment Norepinephrine Responses to Surgical Noxious Stimulation in Humans, 1407

Segerdahl, Märta, *see* Rane, Kerstin

Seirafi, Peter A., *see* Bokesch, Paula M.

Sellke, Frank W., *see* Park, Kyung W.

Seltzer, Joseph L., *see* Greene, Elliott S.

Sessler, Andrew M., *see* Sessler, Daniel I.

Sessler, Daniel I.: A Proposal for New Tem-

perature Monitoring and Thermal Management Guidelines, 1298

Sessler, Daniel I., Sessler, Andrew M.: Experimental Determination of Heat Flow Parameters during Induction of General Anesthesia, 657

Sessler, Daniel I., *see* Alfonsi, Pascal; *also see* Horn, Ernst-Peter; *also see* Kotani, Naoki; *also see* Lenhardt, Rainer; *also see* Rampil, Ira J.

Sha, Keiichi, *see* Tanaka, Yuu

Shafer, Steven L., Eisenach, James C., Hood, David D., Tong, Chuanyao: Cerebrospinal Fluid Pharmacokinetics and Pharmacodynamics of Intrathecal Neostigmine Methylsulfate in Humans, 1074

Shafer, Steven L., *see* Boullion, Thomas

Shafer, Steven L., *see* Somma, Jacques

Shafer, Steven L., *see* Zomorodi, Katayoun

Shamoon, Harry, *see* Amar, David

Sharma, Shiv K., *see* Gambling, David R.

Shavit, Yehuda, *see* Beilin, Benzion

Shelbourne, Courtney, *see* Williams, Andrea R.

Sheth, Rajul, *see* O'Neill, Daniel

Shih, Grace H., Boyd, Gwendolyn L., Vincent, Robert D., Jr., Long, Gary W., Hauth, John C., Georgeson, Keith E.: The EXIT Procedure Facilitates Delivery of an Infant with a Pretracheal Teratoma, 1573

Shih, Henry, *see* Declerck, Christ

Shimizu, Reiju, *see* Hirabayashi, Yoshihiro

Shimoda, Osamu: In Reply, 1282

Shimoji, Koki, *see* Zhan, Ren-Zhi

Shimokawa, Mitsuji, *see* Nishimura, Kenji

Shimokojin, Takeshi, Takenoshita, Makoto, Sakai, Toshiko, Yoshikawa, Kiyoshi: Vocal Cordal Bowing as a Cause of Long-lasting Hoarseness after a Few Hours of Tracheal Intubation, 785

Shimomaka, Hiroyuki, *see* Terazawa, Etsuji

Shin, Young K., Kim, Young D., Collea, Joseph V.: The Effect of Propofol on Isolated Human Pregnant Uterine Muscle, 105

Shiotani, Tadashi, *see* O'Gorman, David A.

Shirakami, Gotaro, *see* Segawa, Hajime

Shubina, Maria, *see* Kohane, Daniel S.

Sidawi, J. Elaine, *see* Gambling, David R.

Sikich, Nancy, *see* Agnor, Ross C.

Silvanus, Marie-Theres, *see* Groeben, Harald

Silverman, Neil S., *see* Arkoosh, Valerie A.

Sims, Stephen, *see* Burton, Allen W.

Singh, Karanbir, *see* Thomson, Ian R.

Sisti, Michael B., *see* Ostapkovich, Noelleen D.

Sittl, Reinhard, *see* Koppert, Wolfgang

Sladen, Robert, *see* Germann, Peter; *also see* Somma, Jacques; *also see* Zomorodi, Katayoun

Smiley, Richard M., *see* Amar, David

Smith, Brian E., *see* Gaba, David M.

Smith, Bruce, *see* Choinière, Manon

Smith, Mark Stafford, *see* Booth, John V.

Smith, Robert A., *see* Bratzke, Edward

Snead, Penny, *see* Bauman, Glenn S.

Snider, Sandra J., *see* Munro, Hamish M.

Sodian, Ralf, *see* Koster, Andreas

Solanki, Daneshvari, *see* Burton, Allen W.

Solanki, Daneshvari S., *see* Joshi, Shailendra

Sollevi, Alf, *see* Rane, Kerstin

Somma, Jacques, Conner, Andrew, Zomorodi, Katayoun, Sladen, Robert, Ramsay, James, Geller, Eran, Shafer, Steven L.: Population Pharmacodynamics of Midazolam Administered by Target Controlled Infusion in SICU Patients after CABG Surgery, 1430

Somma, Jacques, *see* Zomorodi, Katayoun

Song, Dajun, Whitten, Charles W., White, Paul F., Yu, Song Y., Zarate, Eduardo: Antiemetic Activity of Propofol after Sevoflurane and Desflurane Anesthesia for Outpatient Laparoscopic Cholecystectomy, 838

Song, Ho-Kyung, Pan, Hui-Lin, Eisenach, James C.: Spinal Nitric Oxide Mediates Antinociception from Intravenous Morphine, 215

Sonntag, Hans, *see* Kazmaier, Stephan

Sorm, Vera, *see* Verbrugge, Serge J. C.

Southorn, Peter, *see* Greene, Elliott S.

Spalding, Michael B., Ala-Kokko, Tero I.: The Use of Inhaled Sevoflurane for Endotracheal Intubation in Epiglottitis, 1025

Speight, Kevin L.: *Medical Warrior: Fighting Corporate Socialized Medicine*. Edited by Miguel A. Faria, Jr, 1043

Sperry, Richard J.: *Journal of Neurosurgical Anesthesiology*. Edited by James E. Cottrell and John Hartung, 278

Sperry, Richard J., *see* Egan, Talmage D.

Spinal Anesthesia Study Group, *see* Freedman, John M.

Sprung, Juraj, Schoenwald, Peter K., Hayden, John: Bronchospasm and "Reflex Right Upper Lobe Atelectasis", 803

Stalpers, Lukas J. A., *see* Bauman, Glenn S.

Standl, Thomas, *see* Horn, Ernst-Peter

Stanley, James C., *see* Stoneham, Mark D.

Steinberg, Hans Schulte, *see* Dürthorn, Ludwig

Steinberg, Robert B., *see* Reuben, Scott S.

Steiniger, Joseph R., *see* Roberts, Kevin W.

Steinmetz, Andrei, *see* Ezri, Tiberiu

Stephan, Heidrun, *see* Kazmaier, Stephan

Steriti, John, *see* Maslow, Andrew

Stocks, Janet, *see* Brown, Karen

Stone, Bradley A., Leon, Brad: Unusual Cause of Intravenous Catheter Obstruction, 276

Stoneham, Mark D., Doyle, Anthony R., Knighton, John D., Dorje, Pema, Stanley, James C.: Prospective, Randomized Comparison of Deep or Superficial Cervical Plexus Block for Carotid Endarterectomy Surgery, 907

Stowe, David F., *see* Fujita, Satoshi

Strebel, Stephan, *see* Jordi, Eva-Maria

Strebel, Stephan P., Kindler, Christoph, Bissonnette, Bruno, Tschalér, Gabriela, Deanovic, Dubravka: The Impact of Systemic Vasoconstrictors on the Cerebral Circulation of Anesthetized Patients, 67

Streisand, James B.: In Reply, 1281

Strichartz, Gary R., *see* Kohane, Daniel S.

Su, Judy Y., *see* Toda, Hiroshi

Sugerman, Michael, *see* Levine, Rhoda D.

Sullivan, Lisa M., Hoenemann, Christian W.: *Atlas of Anesthesia, Volume I—Critical Care*. Volume edited by Robert R. Kirby. *Volume II—Scientific Principles of Anesthesia*. Volume edited by Debra A. Schwinn. *Volume III—Preoperative Preparation and Intraoperative Monitoring*. Volume edited by J. Lance Lichtor, 1610

Sumita, Shinji, *see* Higuchi, Hideyuki

Suwa, Tomohide, Inomata, Shinichi, Saito, Shigeyuki, Toyooka, Hidenori: Pressure-guided Method for Identification of the Epidural Space in Children, 546

Suzuki, Akiko, *see* Kotani, Naoki

Szmuk, Peter, *see* Ezri, Tiberiu

## T

Taga, Kūchiro, *see* Zhan, Ren-Zhi

Takahashi, Satoshi, *see* Kotani, Naoki

Takahashi, Shosuke, *see* Hoka, Sumio

Takenaka, Ichiro, *see* Nakura, Nariaki

Takenaka, Tomoaki, *see* Hoka, Sumio

Takenoshita, Makoto, *see* Morita, Yasuhiro; *also see* Shimokojin, Takeshi

Talke, Pekka: Receptor-specific Reversible Sedation: Beginning of New Era of Anesthesia?, 560

Tanaka, Makoto, Nishikawa, Toshiaki: Is Phenylephrine or Sodium Bisulfite Neurotoxic?, 272

Tanaka, Satoru, Tsuchida, Hideaki: Effects of Halothane and Isoflurane on  $\beta$ -adrenoceptor-mediated Responses in the Vascular Smooth Muscle of Rat Aorta, 1209

Tanaka, Yoshifumi, *see* Hirose, Munetaka

Tanaka, Yuu, Kawaguchi, Masahiko, Sha,

## AUTHOR INDEX TO VOLUME 89

Keiichi, Kitaguchi, Katsuyasu, Furuya, Hiroshi: Combined Use of Transesophageal Echocardiography and Basket Catheter Can Prevent Tumor Embolism in a Patient with Renal Cell Carcinoma, 1015

Tandon, Monica S., *see* Tempe, Deepak K.

Tan, Peter P. C., *see* Cheng, Ka Shun; *also see* Wang, Yung-Liang

Tavernier, Benoît, Makhotine, Olivier, Lebuffe, Gilles, Dupont, Jacques, Scherperel, Philippe: Systolic Pressure Variation as a Guide to Fluid Therapy in Patients with Sepsis-induced Hypotension, 1313

Tayefeh, Farzin, *see* Lenhardt, Rainer

Taylor, James, Kamaya, Hiroshi: Metallic Mercury Leak from the Esophageal Bougy and Postoperative Chest Pain, 548

Tempe, Deepak K., Mehta, Navneet, Mohan, Jagdish C., Tandon, Monica S., Nigam, Madhuri: Early Hemodynamic Changes following Emergency Mitral Valve Replacement for Traumatic Mitral Insufficiency following Balloon Mitral Valvotomy: Report of Six Cases, 1583

Tendillo, Francisco J., *see* Gomez de Segura, Ignacio A.

Tenling, Arne, Hachenberg, Thomas, Tydén, Hans, Wegenius, Göran, Hedenstierna, Göran: Atelectasis and Gas Exchange after Cardiac Surgery, 371

Terazawa, Etsuji, Shimonaka, Hiroyuki, Nagase, Kiyoshi, Masue, Tatsuhiko, Dohi, Shuji: Severe Anaphylactic Reaction Due to a Chlorhexidine-impregnated Central Venous Catheter, 1296

Tessmer, John P., *see* Hettrick, Douglas A.

Thiagarajah, Christopher K., *see* Thiagarajah, Somasundaram

Thiagarajah, Somasundaram, Thiagarajah, Christopher K.: Create a Party Mood for a Smooth Anesthetic Induction of Children, 802

Thiron, Xavier, *see* Papazian, Laurent

Thisted, Ronald, *see* Renz, Cheryl L.

Thompson, Gale E., *see* Mandabach, Mark G.

Thompson, Susan J., Bernards, Christopher M.: Barrier Properties of the Spinal Meninges Are Markedly Decreased by Freezing Meningeal Tissues, 1276

Thomson, Ian R., Henderson, Blair T., Singh, Karanbir, Hudson, Robert J.: Concentration-Response Relationships for Fentanyl and Sufentanil in Patients Undergoing Coronary Artery Bypass Grafting, 852

Thurn, John D., *see* Renz, Cheryl L.

Thys, Daniel M., *see* Declerck, Christ

Ti, Lian Kah, Dhara, Sasanka Sekhar: Another Cause of a Prolonged Downstroke on the Capnograph, 801

Toda, Hiroshi, Su, Judy Y.: Mechanisms of Isoflurane-increased Submaximum  $Ca^{2+}$ -activated Force in Rabbit Skinned Femoral Arterial Strips, 731

Todd, Michael M.: EEGs, EEG Processing, and the Bispectral Index, 815

Todd, Michael M., *see* Eisenach, James C.

Tomaselli, Gordon F., *see* Balser, Jeffrey R., Tommasino, Concezione: Is Lack of Statistical Power Always Evidence of Lack of Effect?, 798

Tong, Chuanyao, *see* Shafer, Steven L.

Toyooka, Hidenori, *see* Suwa, Tomohide

Toyoshima, Yuki, Tsuchida, Hideaki, Namiki, Akiyoshi: Pneumothorax during Endoscopic Extraperitoneal Herniorraphy, 1040

Trankina, Mark F., *see* Raatikainen, M. J. Pekka

Trapp, Bruce, *see* Bokesch, Paula M.

Troncy, Eric, Blaise, Gilbert: Phenylephrine and Inhaled Nitric Oxide, 538

Tschalèr, Gabriela, *see* Strelbel, Stephan P.

Tschirn, Dirk, *see* Hensel, Mario

Tsuchida, Hideaki, *see* Tanaka, Satoru; *also see* Toyoshima, Yuki; *also see* Yamakage, Michiaki

Turkistani, Ahmed, *see* Naguib, Mohamed

Tydén, Hans, *see* Tenling, Arne

**U**

Uchida, Tokujiro, *see* Nakazawa, Koichi

Ueki, Masaaki, *see* Komatsu, Hisao

Uhrich, Toni D., *see* Ebert, Thomas J.

Ullrich, Roman, *see* Germann, Peter

Upton, Joseph, *see* Henderson, Kristine H.

Ura, Tatsuya, *see* Higuchi, Hideyuki

Uruk, Georg, *see* Germann, Peter

Uttamsingh, Vinita, Iyer, Ramswamy A., Baggs, Raymond B., Anders, M. W.: Fate and Toxicity of 2-(Fluoromethoxy)-1,1,3,3,3-pentafluoro-1-propene (Compound A)-derived Mercapturates in Male, Fischer 344 Rats, 1174

**V**

Valdez, Joe G., *see* Houghton, Andrea K.

Van Ackern, Klaus, *see* Lenz, Christian

Vanaman, Thomas C., *see* Franks, John J.

Van Cleaf, Martha A., *see* Greene, Elliott S.

Van Riper, Daniel F., *see* Bennett, Joel A.

Van Steenberge, Albert, *see* Joos, Stephane

Van Swinderen, Bruno, Galifianakis, Alex, Crowder, C. Michael: Common Genetic Determinants of Halothane and Isoflurane Potencies in *Caenorhabditis elegans*, 1509

Vazquez de Anda, Gilberto, *see* Verbrugge, Serge J. C.

Venezia, Richard A., *see* Greene, Elliott S.

Verbrugge, Serge J. C., Vazquez de Anda, Gilberto, Gommers, Diederik, Neggers, Sebastian J. C. M. M., Sörn, Vera, Böhm, Stephan H., Lachmann, Burkhard: Exogenous Surfactant Preserves Lung Function and Reduces Alveolar Evans Blue Dye Influx in a Rat Model of Ventilation-induced Lung Injury, 467

Vestermann, Marie Noëlle, *see* Mercier, Frédéric J.

Viby-Mogensen, Jørgen: Implementation of Pharmaceutical Practice Guidelines—Once Again, 268

Vieillard-Baron, Antoine, *see* Fourme, Thierry

Villemure, Chantal, *see* Plourde, Gilles

Vincent, Jean-Louis, *see* Preiser, Jean-Charles

Vincent, Robert D., Jr., *see* Shih, Grace H.

Vivien, Benoît, Hanouz, Jean-Luc, Gueugniaud, Pierre-Yves, Lecarpentier, Yves, Coriat, Pierre, Riou, Bruno: Myocardial Effects of Desflurane in Hamsters with Hypertrophic Cardiomyopathy, 1191

Vogt, Alison, *see* Lustik, Stewart J.

Volk, Thomas, *see* Hensel, Mario

Von Knobelsdorff, Georg, *see* Hänel, Frank

**W**

Wada, Hiroki, *see* Higuchi, Hideyuki

Wagner, Deborah S., *see* Polley, Linda S.

Walker, Dean S., *see* Cohen, Sheila E.

Walker, Paul M., *see* Boylan, John F.

Wallace, Arthur W.: In Reply, 796

Wamil, Artur W., *see* Franks, John J.

Wang, Shu-Ming, *see* Kain, Zeev N.

Wang, Yung-Liang, Hsieh, Jing-Ru, Chung, Ham-See, Yu, Chi-Lun, Ho, Angie C. Y., Lu, Pao-Ping, Tan, Peter P. C.: The Local Addition of Tenoxicam Reduces the Incidence of Low Back Pain after Lumbar Epidural Anesthesia, 1414

Wanner, Guido A., *see* Larsen, Brita

Wara, William M., *see* Bauman, Glenn S.

Ward, Denham S., *see* Cartwright, Christopher R.

Warfield, Carol A.: *Pain Management for the Practicing Physician*. Edited by Gordon A. Irving and Mark S. Wallace, 1043

Warkentin, Theodore E., *see* Ling, Elizabeth

Warltier, David C.: In Reply, 797

Warltier, David C., *see* Hettrick, Douglas A.; *also see* Pagel, Paul S.

Warner, David O., *see* Kai, Tetsuya

## AUTHOR INDEX TO VOLUME 89

Warner, David S., Dexter, Franklin: In Reply, 799  
 Warner, David S., *see* Miura, Yoshihide  
 Warner, Kenneth G., *see* Bokesch, Paula M.  
 Warner, Mark A., *see* Halliwill, John R.  
 Waschke, Klaus F., *see* Lenz, Christian  
 Washington, Jackie, *see* Hönenmann, Christian W.  
 Wasnick, John D.: Virtue, Ethics, and Anesthesia, 537  
 Watanabe, Yasuhiko, *see* Haruna, Masaki  
 Watanabe, Yukinaga, *see* Iida, Hiroki  
 Weber, Eckard, *see* Nishiyama, Tomoki  
 Wegenius, Göran, *see* Tenling, Arne  
 Weigand, Markus A., Motsch, Johann, Bardehauer, Hubert J.: Adenosine-induced Transient Cardiac Arrest for Placement of Endovascular Stent-grafts in the Thoracic Aorta, 1037  
 Weindling, Steven N., *see* Gallagher, John D.  
 Weinshel, Sarah, *see* Levine, Rhoda D.  
 Werner, Christian, *see* Hänel, Frank  
 Westlund, Karin N., *see* Houghton, Andrea K.  
 Weyland, Andreas, *see* Kazmaier, Stephan  
 Whitcup, Scott, *see* Sang, Christine N.  
 White, Paul F., *see* Song, Dajun  
 Whitten, Charles W., *see* Song, Dajun  
 Wi, Soora, *see* Freedman, John M.  
 Wierda, J. Mark K. H., *see* Beaufort, Ton M.  
 Wiley, Jackie, *see* Gambling, David R.  
 Wilhelm, Wolfram, *see* Larsen, Brita  
 Williams, Andrea R., Shelbourne, Courtney, Pinosky, Mark: A Method for Measuring Carbon Dioxide at the Tracheal Stoma, 799  
 Williams, Courtney G. A., *see* Burton, Allen W.  
 Willis, William D., *see* Feng, Yi  
 Winters, Bradford D., *see* Balser, Jeffrey R.  
 Wolf, Hannes, *see* Josten, Klaus U.  
 Wolfe, Darren, Hester, Paul, Keil, Ralph L.: Volatile Anesthetic Additivity and Specificity in *Saccharomyces cerevisiae*: Implications for Yeast as a Model System to

Study Mechanisms of Anesthetic Action, 174  
 Wolloch, Yaakov, *see* Beilin, Benzion  
 Wong, David T., *see* Dowd, Noreen P.  
 Woulfe, John, *see* Heath, Karen J.  
 Wu, Rick Sai Chuen, *see* Cheng, Ka Shun  
 Wulf, Hinnerk, Mercker, Stephanie, Maier, Christoph, Neumann, Günther: In Reply, 267  
 Wulf, Hinnerk F. W.: The Centennial of Spinal Anesthesia, 500  
 Wyon, Nicholas, Joensen, Henning, Yamamoto, Yuji, Lindahl, Sten G. E., Eriksson, Lars I.: Carotid Body Chemoreceptor Function Is Impaired by Vecuronium during Hypoxia, 1471

## Y

Yadollahie, Mahboobeh, *see* Habibzadeh, Farrokh  
 Yahagi, Naoki, *see* Haruna, Masaki  
 Yaksh, Tony L., *see* Nishiyama, Tomoki  
 Yamakage, Michiaki, Kohro, Shinji, Matsuoka, Takashi, Tsuchida, Hideaki, Namiki, Akiyoshi: Role of Intracellular  $Ca^{2+}$  Stores in the Inhibitory Effect of Halothane on Airway Smooth Muscle Contraction, 165  
 Yamakura, Tomohiro, *see* Zhan, Ren-Zhi  
 Yamamoto, Yuji, *see* Wyon, Nicholas  
 Yamaura, Ken, *see* Hoka, Sumio  
 Yarmush, Joel M., *see* Ilbegg, Mostafa Shahrokh  
 Yasunaka, Kakuko, *see* Sakuragi, Tadakazu  
 Yee, James B., *see* Egan, Talmage D.  
 Yemen, Terrance A.: Small Doses of Sufentanil Will Produce Violent Coughing in Young Children, 271  
 Yieh, Jamie, *see* Kohane, Daniel S.  
 Yokokawa, Yoko, *see* Saito, Toshiyuki  
 Yokono, Satoshi, *see* Komatsu, Hisao  
 Yokoyama, Kuninori, *see* Nakazawa, Koichi  
 Yoshikawa, Kiyoshi, *see* Shimokojin, Takeshi

Young, Marjorie, *see* Rosenberg, Andrew D.  
 Young, William L., *see* Joshi, Shailendra; *also see* Ostapkovich, Noelleen D.  
 Yu, Chi-Lun, *see* Wang, Yung-Liang  
 Yu, Song Y., *see* Song, Dajun

## Z

Zaffer, Rashid, *see* Michelson, Luis G.  
 Zakhary, Daniel R., *see* Kanaya, Noriaki  
 Zarate, Eduardo, *see* Song, Dajun  
 Zeck, Susanne, *see* Koppert, Wolfgang  
 Zeidel, Alexander, *see* Beilin, Benzion  
 Zhan, Ren-Zhi, Fujiwara, Naoshi, Endoh, Hiroshi, Yamakura, Tomohiro, Taga, Kichihiro, Fukuda, Satoru, Shimoji, Koki: Thiopental Inhibits Increases in  $[Ca^{2+}]$  Induced by Membrane Depolarization, NMDA Receptor Activation, and Ischemia in Rat Hippocampal and Cortical Slices, 456  
 Zhang, Hao, *see* Amar, David  
 Zhou, Jinshi, Dexter, Franklin: Method to Assist in the Scheduling of Add-on Surgical Cases—Upper Prediction Bounds for Surgical Case Durations Based on the Log-normal Distribution, 1228  
 Zhou, Xiping, Abboud, Woroood, Manabat, Nancy C., Salem, M. Ramez, Crystal, George J.: Isoflurane-induced Dilation of Porcine Coronary Arterioles Is Mediated by ATP-sensitive Potassium Channels, 182  
 Zomorodi, Katayoun, Donner, Andrew, Somma, Jacques, Barr, Julianne, Sladen, Robert, Ramsey, James, Geller, Eran, Shaffer, Steven L.: Population Pharmacokinetics of Midazolam Administered by Target Controlled Infusion for Sedation following Coronary Artery Bypass Grafting, 1418  
 Zomorodi, Katayoun, *see* Somma, Jacques  
 Zonis, Zeev, *see* Bar-Joseph, Gad  
 Zvara, David A., *see* Meek, Eric N.

